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ENVIRONMENTAL ASSESSMENT
FOR MARCH 7, 2000
STATE OF MONTANA OIL AND GAS LEASE SALE

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MONTANA DEPARTMENT OF NATURAL RESOURCES AND CONSERVATION
Trust Land Management Division
Minerals Management Bureau
Helena, MT

DEPARTMENT OF NATURAL RESOURCES
AND CONSERVATION

TRUST LAND MANAGEMENT DIVISION

MARC RACICOT, GOVERNOR

1625 ELEVENTH AVENUE

STATE OF MONTANA

DIRECTOR'S OFFICE (406) 444-2074
TELEFAX NUMBER (406) 444-2684

PO BOX 201601
HELENA, MONTANA 59620-1601

February 1, 2000

To Whom it may concern:

We have reviewed the attached Environmental Assessment for the March 7, 2000 lease sale. The stipulations, as listed in Appendix A, sufficiently mitigate environmental concerns with leasing the proposed tracts. There is no need for an EIS for this lease sale.

Monte Mason, MMB Chief — Date 2/2/2000

M. Jeff Hagener, TLMD Administrator — Date 2/2/2000

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ENVIRONMENTAL ASSESSMENT
ON THE
March 7, 2000
OIL AND GAS LEASE SALE

Montana Department of Natural Resources and Conservation
Trust Land Management Division

I. Introduction

The State of Montana owns over six million acres of oil and gas rights that are scattered across the state. The lands that these mineral rights lie under are varied, consisting of timber, grazing, and agricultural land. The state also owns mineral rights below navigable lakes and streams in Montana. Each land type will be impacted differently by oil and gas related activity.

This document contains the environmental review of lands nominated for oil and gas leasing for the **March 7, 2000** lease sale. Alternatives reviewed in this document are 1) No Action - deny the oil and gas lease; and 2) Approve the oil and gas lease with appropriate stipulations.

II. Purpose and Need for the Action

The Montana Department of Natural Resources and Conservation (DNRC) - Trust Land Management Division (TLMD) has received nominations for **89** tracts of land totaling **39,631.19** acres for the purpose of oil and gas exploration and development. A listing of these tracts and their location is found in Appendix A. Prior to leasing the nominated tracts, the TLMD must review each tract for potential impacts on the human and natural environment from oil and gas operations.

By leasing lands for oil and gas exploration, the trusts administered by TLMD benefit from rental and potential royalty income.

III. Agency Responsibilities

A. Department of Natural Resources and Conservation

The Department of Natural Resources and Conservation (DNRC) - Trust Land Management Division (TLMD) is authorized to lease state owned oil and gas for exploration and development (MCA 77-3-401, et seq.). Oil and gas lease sales occur quarterly, as required by ARM 26.3.206(1). Under the Montana Environmental Policy Act (MCA 75-1-201, et seq.), the TLMD must review leasing of nominated tracts for potential impacts on the human and natural environment prior to leasing unless a clause for denial of activity is added to the lease.

The TLMD must decide whether to lease the nominated tracts with appropriate stipulations or deny leasing.

B. Board of Oil and Gas Conservation

The Board of Oil and Gas Conservation (BOGC) is responsible for requiring "measures to be taken to prevent contamination of or damage to surrounding land or underground strata caused by drilling operations and production..." (MCA 82-11-111(2)(a)). The BOGC issues permits for oil and gas drilling operations (MCA 82-11-122), and also oversees proper plugging and abandonment of seismic shotholes and oil and gas wells (MCA 82-11-123(4)). All permitting by the BOGC is subject to an environmental review under the Montana Environmental Policy Act (MCA 75-1-201, et seq.). A programmatic EIS on oil and gas activity was completed by the BOGC in 1989 (BOGC, 1989) and is incorporated in this EA by reference. TLMD adopts the conclusions and information contained in that EIS.

The BOGC is not involved in leasing decisions taken by the TLMD.

IV. Procedure

Notification of the tracts nominated for lease was submitted to the following agencies and individuals for review and comments:

Montana Department of Natural Resources and Conservation - Trust Land Management Division Area Office Managers
Montana Department of Natural Resources and Conservation - TLMD Archeologist and Hydrologist/geologist
Montana Department of Natural Resources and Conservation - TLMD Minerals Management Bureau Chief, Forest Management Bureau Chief, and Land Management Section Supervisor - Agricultural and Grazing Bureau
Montana Department of Fish, Wildlife and Parks Regional Offices and Field Biologists at applicable Area Resource Offices
Montana Natural Heritage Program
Hill County Commissioners
USDI Fish and Wildlife Service
Rocky Boys Agency
Bureau of Indian Affairs, Rocky Boys Agency
Oil and Gas Lease Sale Mailing List
Department Website
(http://www.dnrc.state.mt.us/trust/tlmdhome.htm)

Comments received from these agencies and individuals are reviewed and stipulations are developed for each tract nominated for leasing. Agency comments are located in Appendix C. Appendix D is designated for public comments. However, none have been received as of the January 28, 2000 public comment deadline.

Issues reviewed for this process include:

The presence of sensitive plant and animal communities.
The presence of historical or cultural sites.
Potential impacts of oil and gas related activities on soils, hydrology, wildlife, vegetation, and human resources.
Potential for "No Surface Occupancy" restrictions.
Potential conflicts with current land use (such as Federal Farm Programs including CRP).
Other potential resources for the tract.

Field evaluations from past inspections, information from DNRC-TLMD field office files, and, if necessary, additional on-site evaluations are used by the TLMD field staff in assessing potential impacts from oil and gas leasing and subsequent development. Information contained in the programmatic EIS produced by the BOGC (BOGC, 1989) is also utilized in determining the potential impacts of future oil and gas development for the nominated tracts. Stipulations are then attached to the lease to provide resource protection during future lease operations. These stipulations range from strict, no surface occupancy restrictions to requirements for operating plan approval (with the potential of future denial) to buffer and avoidance stipulations, and surface damage settlement issues. A list of example stipulations is located in Appendix B. Four of these stipulations are placed on all leases and are denoted in Appendix B with an asterisk. Operating plan review is required on all leases either through the use of stipulation A-1 or the sensitive areas stipulations F-1 or F-2 (see Appendix B).

For all nominated tracts, additional environmental assessments will be completed with the receipt of an operating plan by both TLMD and the BOGC. Potential problems are mitigated at that time through modifications in the plan. TLMD can not deny drilling of a well unless stipulated at the time of the lease, but stipulations can be added to the operating plan to mitigate impacts. The BOGC, however, may deny a drilling permit or include additional stipulations in the drilling permit.

For tracts nominated in potentially sensitive areas, two special stipulations have been developed (Appendix B, stipulations F-1 and F-2). Both stipulations create a tiered environmental review process with the potential for future denial of activities. The State Land Board developed stipulation F-2 to address the level of interest and concern expressed over leasing and possible development of state lands located in western Teton and northwestern Lewis and Clark Counties (i.e. the lower elevation eastern slopes of the Rocky Mountain Front, generally west of Choteau and Augusta). Stipulation F-2 outlines Land Board review and approval and delineates the review process. An impact analysis is not required prior to leasing a tract with either of these stipulations. (North Fork Preservation Assoc. v. Dept of State Lands, 238 Mont. 451, 778, P.2d 862 (1989); Conner v. Burford, 836 F.2d 1521 at 1528 (9th Cir., 1988)). When activity is proposed on a lease, the operating plan receives an environmental review. This review consists of an evaluation of impacts of the proposed action. Additional stipulations and mitigating measures may be required prior to the activity, or activity may be denied. Depending on the location and potential impacts from the specific activity proposed, this environmental review could consist of a basic Environmental Assessment up to a full Environmental Impact Statement.

Additional environmental assessments may be necessary with further development of the lease. Environmental assessments are completed as necessary throughout the term of the lease.

V. Public Notification

Public notice of nominated tracts and request for comments is made two months prior to the lease sale in the Rocky Mountain Oil Journal, Billings Gazette, Great Falls Tribune, and Helena Independent Record. The tract list is sent to everyone on the Department's mailing list of approximately 800 individuals, organizations, and companies. Anyone can be added to the mailing list by contacting the Department. Lease sale lists, dates, and important deadlines are also available on the Department's Internet web site

(http://www.dnrc.state.mt.us/trust/tlmdhome.htm). After completion of the Oil and Gas Lease Sale EA, the list of nominated tracts and attached stipulations is published in the Rocky Mountain Oil Journal, made available on the Department's Internet web site, and mailed to everyone on the Department's mailing list.

VI. Resource Analysis

The following issues were analyzed for potential impact on state owned land:

A. Wildlife:

Potential impacts on wildlife for each tract are analyzed by the Department of Natural Resources and Conservation (DNRC) - Trust Land Management Division (TLMD) field office staff with additional input from the MT Department of Fish, Wildlife and Parks (DFWP) regional office staff. Letters requesting information on potential impacts from oil and gas activities are sent to each DFWP regional office by electronic mail or postal mail. Information provided by the MT Natural Heritage Program (MNHP) is also reviewed. Based on comments and information provided, stipulations are applied to protect wildlife resources. If no site-specific response is received from DFWP or TLMD field offices, and the MNHP search turns up no element occurrence data, then no additional stipulations are added to the tract. However, the standard operating plan review stipulation (number 1 in the application list in Appendix A) still allows coverage of wildlife concerns that may arise in any subsequent site-specific review.

For the March 7, 2000 MT Oil and Gas Lease Sale several stipulations have been applied to various tracts due to wildlife concerns. The six MT-DNRC tracts in Lewis and Clark County (application numbers 5079 through 5084) have the Rocky Mountain Front sensitive areas stipulation (number 18 in the application list in Appendix A) applied to address wildlife concerns for various species, including grizzly bears and trumpeter swans. The contact MT Department of Fish, Wildlife and Parks stipulation (see number 11 in Appendix A) is applied to application number 5075 in Big Horn County for burrowing owls and number 5063 in Rosebud County for bald eagles. The wildlife survey stipulation (see number 12 in Appendix A) is utilized on application numbers 5065-5067, 5071, 5074-5076, and 5078 in Big Horn County for sage grouse. It also is applied to application number 5056 in Pondera County for ferruginous hawks and to number 5007 in Hill County for swift fox. The no-surface occupancy of navigable riverbeds and related acreage stipulation (number 14 in Appendix A) covers concerns for pallid sturgeon, least terns, spiny softshell, and a bird rookery along the Yellowstone River for application number 5028 in Dawson County. This stipulation also covers meadow jumping mice and pallid sturgeon for application numbers 5059 and 5060 in Richland County. Utilization of the stream, pond, etc. buffer stipulation (see number 7 in Appendix A) on application number 5052 in Meagher County covers concerns for westslope cutthroat trout.

B. Water Quality:

Potential impacts on surface water resources are analyzed by the TLMD field office staff and the TLMD hydrologist/geologist. Notation is made on locations of perennial and intermittent streams, lakes, ponds, wetlands, springs, wells, ditches, canals, prairie potholes, etc. within a nominated tract. If set-backs from water resources are required, a stipulation is

applied to protect these resources. Ground water resource protection is required by the BOGC, and BOGC permitting is contingent on adequate protection. For this lease sale the 100-feet buffer stipulation is utilized for various scenarios on 73 tracts (see stipulation 7 in application list in Appendix A). Streams, ponds, wetlands, etc. on application numbers 5079 through 5084 in Lewis and Clark County would be covered by application of the Rocky Mountain Front sensitive areas stipulation (number 18, Appendix A). In Hill County, streams, ponds, wetlands, reservoirs, etc. on application numbers 5005-5006 and 5086-5087 would be covered through the utilization of the sensitive areas stipulation (number 17, Appendix A).

Other stipulations are applied to larger water bodies. For this sale, the no-surface occupancy stipulation for navigable river beds and related acreage has been utilized for the Yellowstone River. It is applied to application number 5028 in Dawson County and application numbers 5059 and 5060 in Richland County (see stipulation 14 in the application list in Appendix A). Nilan Reservoir in Lewis and Clark County on application numbers 5079 and 5080 would be covered by application of the Rocky Mountain Front sensitive areas stipulation (number 18, Appendix A).

C. Soils and Topography:

TLMD field office personnel review soil surveys conducted by the USDA-NRCS along with field notes from previous inspections to determine the potential for impacts to fragile soils. If protection of fragile soils is needed, a stipulation is implemented to protect the resource. The TLMD field office personnel and the TLMD geologist/hydrologist also review topographic maps to obtain an indication of the topography. For the March 7, 2000 MT Oil and Gas Lease Sale, rough/steep topography or fragile, unstable soils have resulted in stipulation 10 (see Appendix A) being applied to 32 various tracts. Soils and other surface concerns that may arise during a site-specific review are also handled through the standard operating plan review stipulation (see number 1, Appendix A). Steep topography and unstable soils on the Lewis and Clark County tracts (application numbers 5079 through 5084) are covered by utilization of the Rocky Mountain Front sensitive areas stipulation (number 18, Appendix A). The sensitive areas stipulation (number 17, Appendix A), applied to 4 tracts in Hill County (application numbers 5005-06 and 5086-5087) covers concern for unstable soils and steep topography in these areas.

D. Vegetation

TLMD field office personnel review records in the office for potential impacts on vegetation in an area. Information provided by the Montana Natural Heritage Program is also reviewed by the TLMD geologist/hydrologist. If rare plants or potential for significant impacts exist on a tract, stipulations are implemented to protect these resources. In Sheridan County, blue-eyed grass is covered by applying the stream, pond, prairie pothole, etc. buffer stipulation (number 7, Appendix A) to application number 5041.

In addition, some tracts contain wooded areas that occur outside the area covered by the riparian buffer stipulation (number 7, Appendix A). In order to minimize disturbance to this vegetation, the avoid wooded areas stipulation is utilized on 37 tracts for the March 7, 2000 MT Oil and Gas Lease Sale (see stipulation 9 in application list, Appendix A). Wooded areas on application numbers 5079 through 5084 in Lewis and Clark County are covered by utilization of the Rocky Mountain Front sensitive areas stipulation (number

18, Appendix A). The sensitive areas stipulation (number 17, Appendix A), covers wooded areas on application numbers 5005-06 and 5086-5087 in Hill County.

Since weeds are a concern throughout Montana, a stipulation is added to each lease (see stipulation 4 in Appendix A). This stipulation holds the lessee responsible for controlling noxious weeds introduced by the lessee's activity on the tract and preventing their spread.

E. Land use conflicts:

Nominated tracts are reviewed by TLMD field office personnel for current land use, and potential conflicts are noted. Each lease contains a clause that indicates the oil and gas lessee agrees to be responsible for payment of actual surface damages arising from oil and gas exploration or development. A special stipulation is added to the lease for land involved in the Conservation Reserve Program (CRP)(Appendix A, stipulation 8). This stipulation is applied to application number 5056 in Pondera County, number 5025 in Dawson County, and number 5035 in Fallon County. The lease terms also prohibit drilling within 200 feet of a residence or barn. Usually, oil and gas activity only impacts a small portion of any lease, and conflicts with current land use are rare.

Special stipulations are also utilized for information, for avoidance, or other needed mitigation. For this sale, the "no surface occupancy" stipulation of the cemetery site is applied to application number 5004 in Hill County due to this feature's presence on the tract (see Appendix A, stipulation 15). In addition, another "no surface occupancy" stipulation (number 13, Appendix A) is utilized for a highway tract in Wibaux County (application number 5012). Utilization of the Rocky Mountain sensitive areas stipulation (number 18, Appendix A) on application numbers 5079 and 5080 addresses concerns for existing uses of Nilan Reservoir in Lewis and Clark County.

Furthermore, areas where the state does not own the surface receive the stipulation requiring contact of the surface owner. These tracts occur in varied locations and are also designated in the application list by text and an asterisk (see Appendix A, stipulation 6). This contact stipulation is applied to 12 tracts on the March 7, 2000 MT Oil and Gas Lease Sale.

F. Historical and Cultural Resources:

Each nominated tract is reviewed by TLMD archeologist for the presence of known historical or cultural sites and for the potential of discovery of a new historical or cultural site. Where applicable, TLMD field office staff and the TLMD geologist/hydrologist are consulted regarding paleontological resources on the tracts. A stipulation is added to each lease that protects archaeological, historic, and paleontological sites, and surface activities may be restricted if a significant site is discovered during the lease term (see Appendix A, stipulation 3).

G. Existing facilities/Geologic potential

Each nominated tract is reviewed by the TLMD geologist/hydrologist and Minerals Management Bureau Chief for production potential, production or drilling history, and existing facilities. If concerns exist, stipulations are added to the lease. Example stipulations for these circumstances are located in Appendix B, stipulations K-M. For the March 7, 2000 sale, the

existing facilities stipulation (number 16 in Appendix A) is applied to application number 5056 in Pondera County and number 5085 in Stillwater County.

H. Sensitive Areas

The reasons for sensitive area concerns are varied. They can stem from location of the area or result from concerns regarding one or more of the resource areas mentioned above. For tracts nominated in potentially sensitive areas, two special stipulations have been developed that create a tiered environmental review process with the potential for future denial of activities (Appendix B, stipulations F-1 and F-2). The Rocky Mountain Front sensitive areas stipulation (see number 18 in Appendix A; F-2 in Appendix B) is utilized on the tracts in Lewis and Clark County (application numbers 5079 through 5084) due to their location and proximity to areas of concern for water quality, existing uses, and wildlife, including grizzly bears and trumpeter swans.

In accordance with Land Board direction, tracts on this sale adjacent to and/or within the Rocky Boys Reservation have the sensitive areas stipulation applied (see number 17 in Appendix A; F-1 in Appendix B). The three application numbers in Hill County that fall under this category are as follows: 5005, 5006, and 5086. The sensitive areas stipulation is also utilized on Hill County application number 5087 because it is adjacent to the county's Beaver Creek Park.

VII. Impact Analysis

A. No Action Alternative - Deny the oil and gas lease.

If a lease is denied, the only resource that would be negatively impacted is the loss of revenue from rental and royalty payments to the appropriate trust. All other resources would not be affected.

B. Leasing Alternative

Comments received on potential impacts for these tracts are located in Appendices C and D. Agency comments were requested on **December 30, 1999** and must have been received by **January 26, 2000** for consideration in formulating the stipulations. Agency comments are included in Appendix C. The tract list was made available to the public in early January 2000 for interested party comments. These comments must have been received by **January 28, 2000** for consideration in formulating the stipulations. No public comments were received by this date for inclusion in Appendix D. Late comments are located in Appendix E. Tracts nominated for oil and gas leasing and proposed stipulations are listed in Appendix A.

VIII. Need for an Environmental Impact Statement

The DNRC-TLMD is required to evaluate each action to a "level of detail appropriate to the following considerations: ...the complexity of the proposed action,...the environmental sensitivity of the area affected,...the degree of uncertainty that the proposed action will have a significant impact on the quality of the human environment,...and...the need for and complexity of mitigation required to avoid the presence of significant impacts" (ARM 26.2.645 (2)).

Since environmentally sensitive tracts are stipulated for future environmental review with the submittance of an operating plan, all other tracts nominated are located in areas where potential impacts are minor or can be mitigated upon receipt and review of an operating plan, and the BOGC must approve an operating plan within MEPA prior to drilling activity, an Environmental Impact Statement is not required for the leasing action.

IX. Preparers

Compilation and preparation:

Teresa Kinley, Geologist/Hydrologist, Department of Natural Resources and Conservation (DNRC) - Trust Land Management Division (TLMD)

Agencies and persons consulted:

Monte Mason, Minerals Management Bureau Chief, DNRC-TLMD
Patrick Rennie, Archeologist, DNRC-TLMD
Craig Roberts, Area Manager, Northeast Land Office, DNRC-TLMD
Mark Ahner, Area Manager, Central Land Office, DNRC-TLMD
Dwayne Andrews, Area Manager, Eastern Land Office, DNRC-TLMD
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Mike Aderhold, Regional Supervisor, DFWP Region 4
Harvey Nyberg, Regional Supervisor, DFWP Region 5
Jim Satterfield, Regional Supervisor, DFWP Region 6
Don Hyppa, Regional Supervisor, DFWP Region 7
Martin Miller, Montana Natural Heritage Program
Kemper McMaster, USDI Fish and Wildlife Service
Jim Darling, MT-DFWP Region 5 Fisheries Biologist

X. References

Board of Oil and Gas Conservation. 1989. Programmatic Environmental Impact Statement on Oil and Gas Drilling and Production in Montana, (draft: Jan, 1989, final: Dec, 1989).

APPENDIX A: Nominated Tract Locations and Stipulations

STATE OF MONTANA
OIL & GAS LEASE SALE - MARCH 7, 2000

PRE-SALE APPLICATION REPORT

APP#	STIP	TWP	RGE	SEC	DESCRIPTION		ACRES
LESSOR: DEPT OF NATURAL RESOURCES & CONSERVATION							
BIG HORN							
5064	1,2,3,4,5,9	8.S	42.E	16	NE4NE4		40.00
5065	1,2,3,4,5,7,9,12	8.S	43.E	1	LOTS 2,4, S2, S2NE4, SE4NW4		520.20
5066	1,2,3,4,5,7,9,12	8.S	43.E	2	LOTS 1,4, S2, S2NW4, SW4NE4		520.36
5067	1,2,3,4,5,7,9,12	8.S	43.E	3	LOTS 1 AND 3		80.51
5068	1,2,3,4,5,7,9,10	8.S	43.E	6	LOTS 6,7, E2SW4, SE4		332.23
5069	1,2,3,4,5,7,9,10	8.S	43.E	7	LOTS 1,2,3,4, E2W2, E2		664.64
5070	1,2,3,4,5,7,9,10	8.S	43.E	8	SW4, S2NW4, NW4NW4, SW4SE4		320.00
5071	1,2,3,4,5,7,9,12	8.S	43.E	17	NW4, NE4NE4, NW4SE4		240.00
5072	1,2,3,4,5,7,9	8.S	43.E	18	N2NE4		80.00
5073	1,2,3,4,5,7,10	8.S	43.E	21	S2SE4		80.00
5074	1,2,3,4,5,7,9,12	8.S	43.E	22	N2, N2SE4, NE4SW4		440.00
5075	1,2,3,4,5,7,9,11,12	8.S	43.E	23	ALL		640.00
5076	1,2,3,4,5,7,10,12	8.S	43.E	28	E2E2		160.00
5077	1,2,3,4,5,7	8.S	43.E	33	NW4SE4		40.00
5078	1,2,3,4,5,7,10,12	8.S	43.E	34	N2, N2S2, S2SE4, SE4SW4		600.00
CARBON							
5003	1,2,3,4,5,7,9,10	8.S	23.E	16	ALL		640.00
CASCADE							
5042	1,2,3,4,5,7	14.N	1.E	2	LOTS 1,2, S2NE4, SE4		318.26
5043	1,2,3,4,5,7,9,10	14.N	1.E	10	E2SW4, S2SE4, W2NE4, SE4NE4		280.00
5044	1,2,3,4,5,7,9,10	14.N	1.E	12	W2W2, SE4NW4, NW4SE4, SW4NE4		280.00
5045	1,2,3,4,5,7,9	14.N	1.E	14	ALL		640.00
5046	1,2,3,4,5,6,7	14.N	1.E	16	ALL	*	640.00
5054	1,2,3,4,5,7,9,10	15.N	1.E	36	ALL		640.00
5055	1,2,3,4,5,7,9,10	15.N	2.E	32	N2, N2SW4, SE4		560.00
DAWSON							
5019	1,2,3,4,5,7	13.N	57.E	6	LOT 7, E2SW4, SE4		290.54
5020	1,2,3,4,5,7,10	13.N	57.E	16	NE4NE4, N2NW4, SW4SW4, SE4		320.00
5024	1,2,3,4,5,7,9,10	14.N	56.E	16	ALL		640.00
5025	1,2,3,4,5,7,8,10	14.N	56.E	36	ALL		640.00
5026	1,2,3,4,5,7,10	14.N	57.E	16	ALL		640.00

APP#	STIP	TWP	RGE	SEC	DESCRIPTION		ACRES
5028	1,2,3,4,5,14	16.N	56.E	5	YELLOWSTONE RIVERBED AND RELATED ACREAGE		219.10
5029	1,2,3,4,5,7,9,10	16.N	56.E	16	LOTS 1,2,3,4, E2W2, E2		640.80
5030	1,2,3,4,5,7,10	16.N	56.E	36	LOTS 1 THRU 8, S2N2, SE4		642.08
5031	1,2,3,4,5,7,9,10	16.N	57.E	16	ALL		640.00
5032	1,2,3,4,5,7	16.N	58.E	16	ALL		640.00
FALLON							
5033	1,2,3,4,5,7,9,10	8.N	60.E	3	LOTS 3,4, S2NW4, SW4		320.10
5034	1,2,3,4,5,6,7	8.N	60.E	6	LOTS 1,2,3,4, S2NE4	*	234.10
5035	1,2,3,4,5,7,8	8.N	60.E	8	S2		320.00
5036	1,2;3,4,5,7	8.N	60.E	16	ALL		640.00
5037	1,2,3,4,5,7	9.N	59.E	16	ALL		640.00
5038	1,2,3,4,5,7	9.N	59.E	36	ALL		640.00
5009	1,2,3,4,5,7	10.N	58.E	2	LOTS 1,2, S2NE4, SE4		319.54
5039	1,2,3,4,5,7	10.N	58.E	12	NW4		160.00
5010	1,2,3,4,5,7	10.N	58.E	14	SE4		160.00
5011	1,2,3,4,5,7	10.N	58.E	36	ALL		640.00
5001	1,2,3,4,5,7	10.N	59.E	12	SE4		160.00
5013	1,2,3,4,5,7	10.N	60.E	16	ALL		640.00
5014	1,2,3,4,5,6,7	10.N	60.E	20	NE4	*	160.00
5015	1,2,3,4,5,6,7	10.N	60.E	36	ALL	*	640.00
5017	1,2,3,4,5,7,9,10	11.N	58.E	36	ALL		640.00
HILL							
5006	2,3,4,5,6,17	30.N	14.E	16	ALL	*	640.00
5005	2,3,4,5,17	30.N	14.E	33	ALL		640.00
5086	2,3,4,5,17	30.N	16.E	7	NW4NW4		40.00
5087	2,3,4,5,17	30.N	16.E	16	LOTS 1,2, W2NE4, SE4NE4, SE4		317.17
5088	1,2,3,4,5,7,9,10	30.N	16.E	36	ALL		640.00
5008	1,2,3,4,5,6,7,9	30.N	17.E	36	NW4, N2NE4, SW4NE4, S2SW4	*	360.00
5089	1,2,3,4,5,7,9	31.N	16.E	36	LOTS 1,2,3, W2NE4, W2, SE4		639.83
5004	1,2,3,4,5,6,15	32.N	13.E	36	ALL	*	640.00
5002	1,2,3,4,5,7	33.N	13.E	32	SW4 LESS 1 ACRE		159.00
5007	1,2,3,4,5,7,12	36.N	16.E	18	E2		320.00
LEWIS & CLARK							
5079	2,3,4,5,6,18	20.N	7.W	19	NW4NE4, S2NE4, E2NW4, NE4SW4, SE4 (subject to 70-16-201, MCA)	*	400.00
5080	2,3,4,5,6,18	20.N	7.W	20	E2, W2NW4, SE4NW4, SW4 (subject to 70-16-201, MCA)	*	600.00
5081	2,3,4,5,18	20.N	7.W	28	W2		320.00
5082	2,3,4,5,18	20.N	7.W	29	ALL		640.00

APP#	STIP	TWP	RGE	SEC	DESCRIPTION		ACRES
5083	2,3,4,5,18	20.N	7.W	30	NE4		160.00
5084	2,3,4,5,18	20.N	7.W	33	NE4NE4		40.00
MEAGHER							
5047	1,2,3,4,5,7,9,10	14.N	2.E	4	LOTS 1,2,3,4, S2N2, N2S2, S2SE4		567.32
5048	1,2,3,4,5,7,10	14.N	2.E	8	NW4, S2S2, NW4SE4, S2NE4, NE4NE4		480.00
5049	1,2,3,4,5,7,9	14.N	2.E	10	NW4, SW4SW4, E2SW4, N2SE4, W2NE4		440.00
5050	1,2,3,4,5,7,9,10	14.N	2.E	16	ALL		640.00
5051	1,2,3,4,5,7,9,10	14.N	2.E	22	W2, N2SE4, N2NE4		480.00
5052	1,2,3,4,5,7,10	14.N	2.E	26	ALL		640.00
5053	1,2,3,4,5,6,7,9	14.N	2.E	36	ALL	*	640.00
PONDERA							
5056	1,2,3,4,5,6,7,8,10,12,16	29.N	5.W	36	ALL	*	640.00
RICHLAND							
5060	1,2,3,4,5,14	23.N	59.E	13	YELLOWSTONE RIVERBED AND RELATED ACREAGE IN S2		133.00
5059	1,2,3,4,5,14	23.N	60.E	18	YELLOWSTONE RIVERBED AND RELATED ACREAGE		232.00
ROOSEVELT							
5040	1,2,3,4,5,6,7	27.N	57.E	10	NE4SW4, NE4SE4, S2SE4	*	160.00
ROSEBUD							
5061	1,2,3,4,5,7,9,10	6.S	41.E	16	ALL		640.00
5062	1,2,3,4,5,7,9,10	6.S	41.E	36	LOTS 1,2,3,4, W2E2, W2		638.45
5063	1,2,3,4,5,7,9,10,11	7.S	41.E	16	ALL		640.00
SHERIDAN							
5041	1,2,3,4,5,7	36.N	57.E	16	N2		320.00
STILLWATER							

APP#	STIP	TWP	RGE	SEC	DESCRIPTION	ACRES
5085	1,2,3,4,5,7,16	1.N	21.E	36	ALL	640.00
WIBAUX						
5016	1,2,3,4,5,7,10	11.N	58.E	16	ALL	640.00
5057	1,2,3,4,5,7,9	11.N	59.E	16	ALL	640.00
5058	1,2,3,4,5,7	11.N	59.E	36	ALL	640.00
5018	1,2,3,4,5,7,9	12.N	57.E	16	N2, SE4, E2SW4, NW4SW4	600.00
5021	1,2,3,4,5,7	13.N	57.E	36	ALL	640.00
5022	1,2,3,4,5,7,9,10	13.N	58.E	16	ALL	640.00
5023	1,2,3,4,5,7,9	13.N	58.E	36	ALL	640.00
5027	1,2,3,4,5,7	15.N	58.E	36	W2	320.00
LESSOR: DEPT OF TRANSPORTATION						
WIBAUX						
5012	1,2,3,4,5,13	10.N	60.E	2	A TRACT OF LAND IN LOTS 3 AND 4	1.96

* Part or all of the tract is not state-owned surface.

1. Lessee shall notify and obtain approval from the Department's Trust Land Management Division (TLMD) prior to constructing well pads, roads, power lines, and related facilities that may require surface disturbance on the tract. Lessee shall comply with any mitigation measures stipulated in TLMD's approval.

2. Prior to the drilling of any well, lessee shall send one copy of the well prognosis, including Form 22 "Application for Permit" to the Department's Trust Land Management Division (TLMD). After a well is drilled and completed, lessee shall send one copy of all logs run, Form 4A "Completion Report", and geologic report to TLMD. A copy of Form 2 "Sundry Notice and Report of Wells" or other appropriate Board of Oil & Gas Conservation form shall be sent to TLMD whenever any subsequent change in well status or operator is intended or has occurred. Lessee shall also notify and obtain approval from TLMD prior to plugging a well on the lease premises.

3. The TLMD will complete an initial review for cultural resources and, where applicable, paleontological resources of the area intended for disturbance and may require a resources inventory. Based on the results of the inventory, the TLMD may restrict surface activity for the purpose of protecting significant resources located on the lease premises.

4. The lessee shall be responsible for controlling any noxious weeds introduced by lessee's activity on State-owned land and shall prevent or eradicate the spread of those noxious weeds onto land adjoining the lease premises.

5. The definitions of "oil" and "gas" provided in 82-1-111, MCA, do not apply to this lease for royalty calculation purposes.

6. Lessee must contact the owner of the surface in writing at least 30 days prior to any surface activity. A copy of the correspondence shall be sent to TLMD.

7. No activity shall be allowed within 100 feet of any perennial or seasonal stream, pond, lake, prairie potholes, wetland, spring, reservoir, well, aqueduct, irrigation ditch, canal, or related facilities without prior approval of the TLMD.

8. The lessee is responsible to pay for all damages, including penalties and charges assessed by the USDA-CFSA on CRP lands, as a result of drilling and production on the tract. All damages will be assessed by and paid directly to the TLMD.

9. Wooded areas on this tract will be avoided unless otherwise authorized by the TLMD.

10. Due to unstable soil conditions on this tract and/or steep topography, surface use may be restricted. Seismic activity may be restricted to poltershots.

11. Potential wildlife conflicts have been identified for this tract. The TLMD will contact the Montana Department of Fish, Wildlife & Parks office in the area for advice on alleviating any possible conflicts caused by lessee's proposed activities. Additional mitigation measures may be required.

12. Wildlife species of concern have been identified on or near this tract. A survey in areas of proposed activity may be required prior to disturbance. Identified species will be avoided, unless otherwise authorized by the TLMD. Additional mitigation measures may also be required.

13. No surface occupancy shall be allowed on any portion of this tract which is indicated as right-of-way on the official highway plans on file at the Department of Transportation in Helena, Montana without prior written approval from TLMD.

14. This tract contains navigable river beds. No surface occupancy is allowed within the bed of the navigable river, abandoned channels, or on islands and accretions. In addition, upon completion of a successful well, where river title is disputed, the lessee will file an interpleader action under Rule 22, M.R.Civ.P. in the Montana District Court in which the leased lands are located for all acreage within the lease in which the title is disputed. The lessee shall name all potential royalty claimants as defendants.

15. No surface occupancy of the cemetery site is permitted without written approval of TLMD.

16. This tract has an existing well and related facilities. The lessee has 45 days from the effective date of this lease to determine whether or not to assume responsibility for the well and any existing facilities. The lessee may not enter the well until a change of operator has been filed with, and approved by, the Board of Oil and Gas Conservation.

17. This lease includes areas that may be environmentally sensitive. Therefore, if the lessee intends to conduct any activities on the lease premises, the lessee shall submit to TLMD one copy of an Operating Plan or Amendment to an existing Operating Plan, describing in detail the proposed activities. No activities shall occur on the tract until the Operating Plan or Amendments have been approved in writing by the Director of the Department. TLMD shall review the Operating Plan or Amendment and notify the lessee if the Plan or Amendment is approved or disapproved.

    After an opportunity for an informal hearing with the lessee, surface activity may be denied or restricted on all or portions of any tract if the Director determines in writing that the proposed surface activity will be detrimental to trust resources and therefore not in the best interests of the trust.

18. This lease is located near the Rocky Mountain Front and includes areas that are environmentally sensitive. Therefore, except as otherwise provided below, the lessee shall not conduct any surface operations on the lease premises. If the lessee determines that surface operation on the lease premises may be required, the lessee shall submit a proposed Operating Plan or Amendment to an existing Operating Plan to the State Board of Land Commissioners describing in detail the proposed operations. No surface activities shall occur on the lease premises unless and until the Operating Plan or Amendment is approved by the Board. In determining whether to approve the proposed Operating Plan or Amendment, the following provisions shall apply:

(1) If the lessee proposes an activity that does not entail any significant surface disturbance, the Board may approve the same after completion of the appropriate environmental review in accordance with the Montana Environmental Policy Act (MEPA) and an opportunity for public comment on the proposed activity has been provided.

(2) Before the Board approves any proposed activity on the lease premises that entails a significant disturbance, an environmental impact statement (EIS) shall be completed in accordance with MEPA. The EIS shall analyze the potential impacts of alternative and future potential levels of oil & gas development and extraction on an ecosystem scale as the ecosystem is defined by the "Limits of Acceptable Change - Bob Marshall Wilderness Complex" adopted by the Montana Department of Fish, Wildlife & Parks in December 1991. The analysis shall consider all relevant information, which may include, but is not limited to, existing environmental reviews and management plans. Public involvement in the environmental review process shall be actively solicited by the preparer of the environmental review document and shall include, at minimum, adequately noticed public meetings in at least three communities including Great Falls and Helena.

(3) The proposed surface activity shall adhere to the "Interagency Rocky Mountain Front, Wildlife Monitoring/Evaluation Program, Management Guidelines for Selected Species" adopted by the Montana Department of Fish, Wildlife & Parks in September 1987, or any successor guidelines thereto.

(4) The Board may refuse to approve any proposed surface operations if it determines that they do not constitute the best use of trust resources or are not in the best interest of the State of Montana.

* Part or all of the tract is not state-owned surface.

Sight drafts will not be accepted. The State Board of Land Commissioners reserves the right to reject any and all bids. All payments are due within ten days after date of sale.

An Environmental Assessment is available upon request from the Department of Natural Resources & Conservation, Trust Land Management Division, P.O. Box 201601, Helena, MT 59620-1601.

Individuals with disabilities needing assistance or special services, please call Barbara Hamburg at (406)444-2074 at least 1 week prior to the sale.

STATE BOARD OF LAND COMMISSIONERS

APPENDIX B: Example Stipulations for Oil and Gas Leasing.

Stipulations marked with (*) are placed on all leases.

Notification

A-1. Lessee shall notify and obtain approval from the Department's Trust Land Management Division (TLMD) prior to constructing well pads, roads, power lines, and related facilities that may require surface disturbance on the tract. Lessee shall comply with any mitigation measures stipulated in TLMD's approval.

*A-2. Prior to the drilling of any well, lessee shall send one copy of the well prognosis, including Form 22 "Application for Permit" to the Department's Trust Land Management Division (TLMD). After a well is drilled and completed, lessee shall send one copy of all logs run, Form 4A "Completion Report", and geologic report to TLMD. A copy of Form 2 "Sundry Notice and Report of Wells" or other appropriate Board of Oil and Gas Conservation form shall be sent to TLMD whenever any subsequent change in well status or operator, is intended or has occurred. Lessee shall also notify and obtain approval from the TLMD prior to plugging a well on the lease premises.

Cultural

*B. The TLMD will complete an initial review for cultural resources and, where applicable, paleontological resources of the area intended for disturbance and may require a resources inventory. Based on the results of the inventory, the TLMD may restrict surface activity for the purpose of protecting significant resources located on the lease premises.

Weeds

*C. The lessee shall be responsible for controlling any noxious weeds introduced by Lessee's activity on State-owned land and shall prevent or eradicate the spread of those noxious weeds onto land adjoining the lease premises.

Royalty Calculation

*D. The definitions of "oil" and "gas" provided in 82-1-111, MCA, do not apply to this lease for royalty calculation purposes.

CRP Land and Damages

E. The lessee is responsible to pay for all damages, including penalties and charges assessed by the USDA-CFSA on CRP lands, as a result of drilling and production on the tract. All damages will be assessed by and paid directly to the TLMD.

Sensitive Areas

F-1. This lease includes areas that may be environmentally sensitive. Therefore, if the lessee intends to conduct any activities on the lease premises, the lessee shall submit to TLMD one copy of an Operating Plan or Amendment to an existing Operating Plan, describing in detail the proposed activities. No activities shall occur on the tract until the Operating Plan or Amendments have been approved in writing by the Director of the Department. TLMD shall review the Operating Plan or Amendment and notify the lessee if the Plan or Amendment is approved or disapproved.

After an opportunity for an informal hearing with the lessee, surface activity may be denied or restricted on all or portions of any tract if the Director determines in writing that the proposed surface activity

will be detrimental to trust resources and therefore not in the best interests of the trust.

F-2. This lease is located near the Rocky Mountain Front and includes areas that are environmentally sensitive. Therefore, except as otherwise provided below, the lessee shall not conduct any surface operations on the lease premises. If the lessee determines that surface operation on the lease premises may be required, the lessee shall submit a proposed Operating Plan or Amendment to an existing Operating Plan to the State Board of Land Commissioners describing in detail the proposed operations. No surface activities shall occur on the lease premises unless and until the Operating Plan or Amendment is approved by the Board. In determining whether to approve the proposed Operating Plan or Amendment, the following provisions shall apply:

1) If the lessee proposes an activity that does not entail any significant surface disturbance, the Board may approve the same after completion of the appropriate environmental review in accordance with the Montana Environmental Policy Act (MEPA) and an opportunity for public comment on the proposed activity has been provided.

2) Before the Board approves any proposed activity on the lease premises that entails a significant surface disturbance, an environmental impact statement (EIS) shall be completed in accordance with MEPA. The EIS shall analyze the potential impacts of alternative and future potential levels of oil and gas development and extraction on an ecosystem scale as the ecosystem is defined by the "Limits of Acceptable Change--Bob Marshall Wilderness Complex" adopted by the Montana Department of Fish, Wildlife & Parks in December 1991. The analysis shall consider all relevant information, which may include, but is not limited to, existing environmental reviews and management plans. Public involvement in the environmental review process shall be actively solicited by the preparer of the environmental review document and shall include, at minimum, adequately noticed public meetings in at least three communities including Great Falls and Helena.

3) The proposed surface activity shall adhere to the "Interagency Rocky Mountain Front, Wildlife Monitoring/Evaluation Program, Management Guidelines for Selected Species" adopted by the Montana Department of Fish, Wildlife & Parks in September 1987, or any successor guidelines thereto.

4) The Board may refuse to approve any proposed surface operations if it determines that they do not constitute the best use of trust resources or are not in the best interest of the State of Montana.

Navigable Rivers

G. This tract contains navigable river beds. No surface occupancy is allowed within the bed of the navigable river, abandoned channels, or on islands and accretions. In addition, upon completion of a successful well, where river title is disputed, the lessee will file an interpleader action under Rule 22, M.R.Civ.P. in the Montana District Court in which the leased lands are located for all acreage within the lease in which the title is disputed. The lessee shall name all potential royalty claimants as defendants.

Surface not State Owned

H. Lessee must contact the owner of the surface in writing at least 30 days prior to any surface activity. A copy of the correspondence shall be sent to TLMD.

No Surface Occupancy

I. No surface occupancy shall be allowed on this tract unless otherwise approved in writing by the Director of DNRC.

J. No surface occupancy shall be allowed on any portion of this tract which is indicated as right-of-way on the official highway plans on file at the Department of Transportation in Helena, Montana without prior written approval from TLMD.

Existing Production Restrictions

K. Lessee will need to make settlement for the value of the equipment with previous lessee. A copy of this settlement will be sent to the TLMD for their records.

Existing Facilities

L. This tract has an existing well and related facilities. The lessee has 45 days from the effective date of this lease to determine whether or not to assume responsibility for the well and any existing facilities. The lessee may not enter the well until a change of operator has been filed with, and approved by, the Board of Oil and Gas Conservation.

Drainage Occurring

M. It is the opinion of the TLMD that drainage is occurring on the land described in this lease and that if a well is not drilled within two years after this lease is issued the department will consider cancellation of the lease for failure to drill an offset well.

Forested Tracts - Timber

N. Prior to the cutting or removal of timber on these tracts for exploration or development related activities, the lessee shall acquire the approval of the appropriate TLMD area office.

Wildlife Restrictions

O. To protect wildlife during periods important to their survival, surface occupancy or other activity shall be restricted from March 15 through July 15 of each year unless otherwise authorized in writing by the TLMD.

P. Potential wildlife conflicts have been identified for this tract. The TLMD will contact the Montana Department of Fish, Wildlife, and Parks office in the area for advice on alleviating any possible conflicts caused by lessee's proposed activities. Additional mitigation measures may be required.

Q. Wildlife species of concern have been identified on or near this tract. A survey in areas of proposed activity may be required prior to disturbance. Identified species will be avoided, unless otherwise authorized by the TLMD. Additional mitigation measures may also be required.

Miscellaneous Restrictions

R. Any activity within 1/8 mile of the river or lake/reservoir on or adjacent to this tract must be approved in writing by the TLMD prior to commencement. No surface occupancy is allowed within the bed of the river, abandoned channels, the bed of the lake/reservoir, or on islands and accretions associated with the river or lake/reservoir.

S. No activity shall be allowed within 100 feet of any perennial or seasonal stream, pond, lake, prairie pothole, wetland, spring, reservoir, well, aqueduct, irrigation ditch, canal, or related facilities without prior approval of the TLMD.

T. Due to unstable soil conditions on this tract and/or steep topography, surface use may be restricted. Seismic activity may be restricted to poltershots.

U. Due to existing surface uses (such as center pivots, wheel lines, etc.) development on this tract may be restricted.

V. Plant species of concern have been identified on or near this tract. A vegetation survey in areas of proposed activity will be required prior to disturbance. Identified rare plant species will be avoided, unless otherwise authorized by the TLMD.

W. A critical weed problem exists on this tract. Additional mitigation measures will be required to prevent further spread of noxious weeds. The department may require such measures as power washing of vehicles, car pooling, timing restrictions for seismic, etc. to facilitate this prevention.

X. This tract contains biological weed-control sites which must be avoided unless otherwise authorized by TLMD.

Y. No surface occupancy of the cemetery site is permitted without written approval of TLMD.

Z. Wooded areas on this tract will be avoided unless otherwise authorized by the TLMD.

AA. No surface occupancy of the school area and/or related facilities is permitted without written approval of TLMD.

BB. Lease contains a well certified for domestic use by the Board of Oil and Gas Commission (BOGC). Therefore, BOGC does not consider this well to be subject to well spacing regulations.

CC. This lease is issued subject to a prior existing State of Montana coal lease. Lessee's right to search, develop, and produce oil and gas may be restricted by such prior existing lease rights.

DD. A gas storage unit exists on this tract. TLMD will solicit comments from gas storage operator (if other than lessee) if drilling through the gas storage reservoir is proposed, and TLMD may include reasonable protective stipulations in approving Lessee's operating plan. As part of its regulatory review, the BOGC may also require protective measures to ensure no impact to the gas storage reservoir.

EE. No surface occupancy of radio tower sites or related facilities is permitted without written approval of TLMD.

APPENDIX C: Agency Comments Received Before Deadline

DEPARTMENT OF NATURAL RESOURCES
AND CONSERVATION

TRUST LAND MANAGEMENT DIVISION
MARC RACICOT, GOVERNOR
1625 ELEVENTH AVENUE
STATE OF MONTANA
DIRECTOR'S OFFICE (406) 444-2074
TELEFAX NUMBER (406) 444-2684
PO BOX 201601
HELENA, MONTANA 59620-1601

December 30, 1999

MEMORANDUM

TO: Patrick Rennie, Archaeologist, Ag. & Grazing Management Bureau

FROM: Teresa Kinley, Hydrologist/Geologist, Minerals Management Bureau Teresa Kinley

RE: March 7, 2000 State of Montana Oil and Gas Lease Sale

Please review the attached list of tracts for the upcoming oil and gas lease sale for cultural areas of concern. Prior to leasing, the Department complete an environmental assessment of the properties. One of the purposes of this assessment is to mitigate potential cultural concerns that could be affected by oil and gas exploration by adding stipulations to the leases. As usual the standard cultural stipulation will be placed on all tracts.

Let me know if there are any concerns which may require other stipulations on the leases. If you have any questions, please ask me or Monte Mason. Please return your comments by January 26, 2000.

Thank you for your help.

Attachment

Teresa:
The standard archae. stip will be adequate for all of the listed leases.

Patrick

Comment noted.
The cultural resources/paleontological resources stipulation will be added to all tracts/leases.

TO: Teresa Kinley
FROM: Don Kendall DAK
DATE: Dec. 30, 1999
SUBJECT: O & G Sale for 3-7-2000

Attached please find my reviews of the two new tracts in SLO.

There are no changes to all of the tracts previously reviewed.

Thanks.

Don

RECEIVED
JAN 03 2000
D.N.R.C.

SLO OIL & GAS LEASE APPLICATIONS
Sale Date: 3-7-2000

County: Carbon

App. No.: 5003

Legal: All - Sec. 16 - T. 8S. - R. 23E. (#100)

CRP: NONE

WILDLIFE	W.T. Deer ____	Turkey ____	Song Birds X
	Mule Deer Y	Sage Grouse ____	Predators X
	Antelope ____	Other Game Birds Y	Other ____
	Elk ____		
CULTURAL	None Known		
SURFACE WATER	River (Name) ____		Spring ____
	Lake (Name) ____		Reservoir ____
	Perennial Stream (Name) ____		Other ____
	Intermittent Stream Tributaries to Hunt Creek		The stream buffer stip will be added to the lease.
SOILS	Varies — thin & rocky ... sandy ... or silty clay (Covered under base stip #1) and The steep topography / unstable soil stip will be added to the lease.		
TIMBER	None X	Remarks:	
	Non-Commercial ____		
	Commercial ____		
IMPROVEMENTS	NONE		
OTHER			

SLO OIL & GAS LEASE APPLICATIONS
Sale Date: 3-7-2000

County: Big Horn

App. No.: 5064

Legal: NENE, Sec. 16, T. 8 S., R. 42E. (#2226)

CRP: NO

WILDLIFE	W.T. Deer ____ Turkey X Song Birds X Mule Deer X Sage Grouse ____ Predators X Antelope ____ Other Game Birds X Other ____ Elk ____
CULTURAL	None Known
SURFACE WATER	River (Name) ____ Spring ____ Lake (Name) NONE Reservoir ____ Perennial Stream (Name) ____ Other ____ Intermittent Stream ____
SOILS	Thin, rocky
TIMBER	None ____ Remarks: Non-Commercial ____ Commercial Ponderosa Pine – marginal The avoid wooded areas stip will be added to the lease.
IMPROVEMENTS	Fence on North line
OTHER	

16- 8 S. - 42 - 1

SLO OIL & GAS LEASE APPLICATIONS
Sale Date: 9-1-98

County: Big Horn

App. No.: 5013

Legal: 1- 8 S, - 43 E, (Part) (9826)

RP: NO

WILDLIFE	W.T. Deer ____ Turkey ____ Song Birds ✓ Mule Deer ✓ Sage Grouse ✓ Predators ✓ Antelope ✓ Other Game Birds ✓ Other ____ Elk ____ Survey stip added to lease For sage grouse
CULTURAL	None Known
SURFACE WATER	River (Name) ____ Spring ____ Lake (Name) ____ Reservoir ____ Perennial Stream (Name) ____ Other ____ Intermittent Stream Stroud Creek Stream buffer stip added to the lease.
SOILS	Varies ... Thin & Rocky to Deep & Well Drained
TIMBER	None ____ Non-Commercial ✓ Commercial ____ Remarks: Avoid wooded areas stip added to the lease
IMPROVEMENTS	Co. Rd. Gravel Pit.
OTHER	

SLO OIL & GAS LEASE APPLICATIONS
Sale Date: 9-1-98

County: Big Horn
App. No.: 5014
Legal: 2- 8S.- 43E. (Part) (9826)
NSO: NO

WILDLIFE	W.T. Deer ____	Turkey ____	Song Birds ✓
	Mule Deer ✓	Sage Grouse ✓	Predators ✓
	Antelope ✓	Other Game Birds ✓	Other ____
	Elk ____	Survey stip added to lease for sage grouse.	
CULTURAL	None Known		
SURFACE WATER	River (Name) ____		Spring ____
	Lake (Name) ____		Reservoir ____
	Perennial Stream (Name) ____		Other ____
	Intermittent Stream Stroud Creek		Stream buffer stip added to the lease
SOILS	Varies — Thin & Rocky to Deep & Well Drained		
TIMBER	None ____	Remarks:	
	Non-Commercial ✓	Avoid wooded areas stip added to lease	
	Commercial ____		
IMPROVEMENTS	Co. Rd. Gravel Pit		
OTHER			

SLO OIL & GAS LEASE APPLICATIONS
Sale Date: 9-1-98

County: Big Horn

App. No.: 5015

Legal: 3 - 8 S. - 43 E. (Part) (9826)

CRP: NO

WILDLIFE	W.T. Deer ____ Turkey ____ Song Birds ✓ Mule Deer ✓ Sage Grouse ✓ Predators ✓ Antelope ✓ Other Game Birds ✓ Other ____ Elk ____ Survey stip added to the lease for sage grouse
CULTURAL	None Known
SURFACE WATER	River (Name) ____ Spring ____ Lake (Name) ____ Reservoir ____ Perennial Stream (Name) ____ Other ____ Intermittent Stream Stroud Creek Stream buffer stip added to the lease
SOILS	Thin & Rocky to Deep & Poorly Drained
TIMBER	None ____ Non-Commercial ✓ Commercial ____ Remarks: Avoid wooded areas stip, added to the lease
IMPROVEMENTS	
OTHER	

SLO OIL & GAS LEASE APPLICATIONS
Sale Date: 9-1-98

County: Big Horn

App. No.: 5016

Legal: 6- 8 S.- 43 E. (Part) (1379)

CRP: NO

WILDLIFE	W.T. Deer ____	Turkey ✓	Song Birds ✓
	Mule Deer ✓	Sage Grouse ____	Predators ✓
	Antelope ____	Other Game Birds ✓	Other ____
	Elk ____		
CULTURAL	Not Known		
SURFACE WATER	River (Name) ____		Spring ____
	Lake (Name) ____		Reservoir ____
	Perennial Stream (Name) ____		Other ____
	Intermittent Stream Rough Creek		Stream buffer stip added to the lease
SOILS	Thin & Very Rocky to Deep & Poorly Drained		
TIMBER	None ____	Remarks:	
	Non-Commercial ✓	Avoid wooded areas stip. added to the lease	
	Commercial ____		
IMPROVEMENTS			
OTHER	Physically very limited O&G opportunity - Steep topography Stip added to lease		

SLO OIL & GAS LEASE APPLICATIONS
Sale Date: 9-1-98

County: Big Horn
App. No.: 5017
Legal: 7- 8 S.- 43 E. (1379)
CRP: NO

WILDLIFE	W.T. Deer ____ Turkey ✓ Song Birds ✓ Mule Deer ✓ Sage Grouse ____ Predators ✓ Antelope ✓ Other Game Birds ✓ Other ____ Elk ____
CULTURAL	None Known
SURFACE WATER	River (Name) ____ Spring ____ Lake (Name) ____ Reservoir ____ Perennial Stream (Name) ____ Other ____ Intermittent Stream Ranch Creek Stream buffer stip. added to lease
SOILS	Thin & Very Rocky to Mod. Deep & Well Drained.
TIMBER	None ____ Non-Commercial ✓ Commercial ____ Remarks: Avoid wooded areas stip added to lease.
IMPROVEMENTS	
OTHER	

SLO OIL & GAS LEASE APPLICATIONS
Sale Date: 9-1-98

ounty: Big Horn

pp. No.: 5018

egal: 8- 8 S. - 43 E. (Part) (1379)

RP: NO

WILDLIFE	W.T. Deer ____ Turkey ✓ Song Birds ✓ Mule Deer ✓ Sage Grouse ____ Predators ✓ Antelope ✓ Other Game Birds ✓ Other ____ Elk ____
CULTURAL	None Known
SURFACE WATER	River (Name) ____ Spring ____ Lake (Name) ____ Reservoir ____ Perennial Stream (Name) Hanging Woman Creek Other ____ Intermittent Stream ____ Stream buffer stip added to lease.
SOILS	Varies: Steep & Very Rocky to Steep topography/soils Mod. & Well Drained to stip added Deep & Poorly Drained to lease.
TIMBER	None ____ Remarks: Non-Commercial ✓ Avoid wooded areas Commercial ____ stip added to lease.
IMPROVEMENTS	Boundary Fence.
OTHER	

SLO OIL & GAS LEASE APPLICATIONS
Sale Date: 9-1-98

County: Big Horn

App. No.: 5024

Legal: 17-8S.-43E. (Part) (9828 & 1380)

CRP: NO

WILDLIFE	W.T. Deer ____ Turkey ____ Song Birds ✓ Mule Deer ✓ Sage Grouse ✓ Predators ✓ Antelope ✓ Other Game Birds ✓ Other ____ Elk ____ Survey Stip added to lease For Sage grouse.
CULTURAL	None Known
SURFACE WATER	River (Name) ____ Spring ____ Lake (Name) ____ Reservoir ____ Perennial Stream (Name) Hanging Woman Creek Other ____ Intermittent Stream ____ Stream buffer stip added to lease
SOILS	Varies: Thin & Rocky to Deep & Partly Drained Covered under base stip #1
TIMBER	None ____ Non-Commercial ✓ Commercial ____ Remarks: Avoid wooded areas Stip added to lease.
IMPROVEMENTS	Fence.
OTHER	

SLO OIL & GAS LEASE APPLICATIONS
Sale Date: 9-1-98

ounty: Big Horn

pp. No.: 5025

egal: 18-85.-43E. (Part) (9820)

RP: NO

WILDLIFE	W.T. Deer ____	Turkey ____	Song Birds ✓
	Mule Deer ✓	Sage Grouse ____	Predators ✓
	Antelope ____	Other Game Birds ✓	Other ____
	Elk ____		
CULTURAL	None Known		
SURFACE WATER	River (Name) ____		Spring ____
	Lake (Name) ____		Reservoir ____
	Perennial Stream (Name) ____		Other ____
	Intermittent Stream ✓		Stream buffer stip added to lease.
SOILS	Thins Rocky		Covered under base stip #1.
TIMBER	None ____	Remarks:	Avoid wooded areas stip added to lease.
	Non-Commercial ✓		
	Commercial ____		
IMPROVEMENTS	None		
OTHER			

SLO OIL & GAS LEASE APPLICATIONS
Sale Date: 9-1-98

County: By Horn
App. No.: 5026
Legal: 21-8S.-43E. (Part) (10038)
CRP: NO

WILDLIFE	W.T. Deer ____	Turkey ____	Song Birds ✓
	Mule Deer ✓	Sage Grouse ____	Predators ✓
	Antelope ____	Other Game Birds ____	Other ____
	Elk ____		
CULTURAL	Wing Horn		
SURFACE WATER	River (Name) ____		Spring ____
	Lake (Name) ____		Reservoir ____
	Perennial Stream (Name) ____		Other ____
	Intermittent Stream ____		
SOILS	Thin & Rocky	Steep Topography / unstable soil stip added to lease.	
TIMBER	None ✓	Remarks:	
	Non-Commercial ____		
	Commercial ____		
IMPROVEMENTS			
OTHER			

SLO OIL & GAS LEASE APPLICATIONS
Sale Date: 9-1-98

County: Big Horn

App. No.: 5027

Legal: 22 - 8 S. - 43 E. (Part) (10038)

CRP: NO

WILDLIFE	W.T. Deer ____	Turkey ____	Song Birds ✓
	Mule Deer ✓	Sage Grouse ✓	Predators ✓
	Antelope ✓	Other Game Birds ✓	Other ____
	Elk ____	Survey stip added to lease For sage grouse	
CULTURAL	None Known		
SURFACE WATER	River (Name) ____		Spring ____
	Lake (Name) ____		Reservoir ____
	Perennial Stream (Name) ____		Other ____
	Intermittent Stream Horse Creek	stream buffer stip added to lease.	
SOILS	Varies — Thin & Rocky to Deep & Poorly Drained Covered under base stip #1		
TIMBER	None ____	Remarks:	
	Non-Commercial ✓	Avoid Wooded areas stip. added to lease.	
	Commercial ____		
IMPROVEMENTS			
OTHER			

SLO OIL & GAS LEASE APPLICATIONS
Sale Date: 7-1-98

County: Big Horn
App. No.: 5028
Legal: 23-8S.-43E. (10038)
CRP: NO

WILDLIFE	W.T. Deer ____ Turkey ____ Song Birds ✓ Mule Deer ✓ Sage Grouse ✓ Predators ____ Antelope ✓ Other Game Birds ✓ Other ____ Elk ____ Contact FWP stip added to lease for burrowing owl and Survey for sage grouse. 1/25/2000
CULTURAL	None Known
SURFACE WATER	River (Name) ____ Spring ____ Lake (Name) ____ Reservoir ✓ Perennial Stream (Name) ____ Other ____ Intermittent Stream Horse Creek Stream, etc. buffer stip added to lease
SOILS	Varies: Thin & Rocky to Deep & Poorly Drained Covered under base stip #1
TIMBER	None ____ Remarks: Non-Commercial ✓ Avoid wooded areas stip added to lease. Commercial ____
IMPROVEMENTS	Cross Fence Windmill/Tank Reservoir
OTHER	

SLO OIL & GAS LEASE APPLICATIONS
Sale Date: 9-1-98

County: Big Horn

App. No.: 5033

Legal: 28-8S.-43E. (Part) (10039)

CRP: NO

WILDLIFE	W.T. Deer ____ Turkey ____ Song Birds ✓ Mule Deer ✓ Sage Grouse ✓ Predators ✓ Antelope ✓ Other Game Birds ✓ Other ____ Elk ____ Survey stip added to tract For sage grouse
CULTURAL	None Known
SURFACE WATER	River (Name) ____ Spring ____ Lake (Name) ____ Reservoir ____ Perennial Stream (Name) ____ Other ____ Intermittent Stream ✓ Stream buffer stip added to lease
SOILS	Varies! Thin & Rocky to Deep & Poorly Drained Steep Topography stip added to lease. Soils under it & base stip #1
TIMBER	None ✓ Remarks: Non-Commercial ____ Commercial ____
IMPROVEMENTS	
OTHER	

SLO OIL & GAS LEASE APPLICATIONS
Sale Date: 9-1-98

ounty: Big Horn

pp. No.: 5034

egal: 33-85-43E. (Part) (10039)

RP: NO

WILDLIFE	W.T. Deer ____	Turkey ____	Song Birds ✓
	Mule Deer ✓	Sage Grouse ____	Predators ✓
	Antelope ____	Other Game Birds ✓	Other ____
	Elk ____		
CULTURAL	Non Known		
SURFACE WATER	River (Name) ____		Spring ____
	Lake (Name) ____		Reservoir ____
	Perennial Stream (Name) ____		Other ____
	Intermittent Stream ✓		Stream buffer stip added to lease
SOILS	Mod. Deep, Well Drained		Covered under bar stip #1
TIMBER	None ✓		Remarks:
	Non-Commercial ____		
	Commercial ____		
IMPROVEMENTS	Co. Rd. Cross Fence		
OTHER			

SLO OIL & GAS LEASE APPLICATIONS
Sale Date: 9-1-98

County: Big Horn

App. No.: 5035

Legal: 34-85,-43E. (Part) (10039)

CRP: NO

WILDLIFE	W.T. Deer ____	Turkey ____	Song Birds L
	Mule Deer ✓	Sage Grouse L	Predators L
	Antelope ✓	Other Game Birds ✓	Other ____
	Elk ____	Survey stip added to lease For sage grouse	
CULTURAL	Non Known		
SURFACE WATER	River (Name) ____		Spring ____
	Lake (Name) ____		Reservoir ____
	Perennial Stream (Name) ____		Other ____
	Intermittent Stream ✓		stream buffer stip added to lease
SOILS	Steep & Rocky to Mod. & Well Drained Steep topography/soils stip added to lease.		
TIMBER	None ✓	Remarks:	
	Non-Commercial ____		
	Commercial ____		
IMPROVEMENTS			
OTHER			

SLO OIL & GAS LEASE APPLICATIONS

Sale Date: 9-9-97

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JUL 16 1997

NMC

County: Stillwater

App. No.: 5015

Legal: Sec. 36, T. 1N, R. 2E. (3380)

CRP: NO

Wildlife:	Deer, Game Birds
Cultural:	None Known
Surface Water:	Herd of intermittent drainage. Stream buffer stipadded to tract.
Soils:	NA
Timber:	None
Improvements:	Cross Fence
Other:	

DEPARTMENT OF NATURAL
RESOURCES AND CONSERVATION
NORTHEASTERN LAND OFFICE

STATE OF MONTANA

(406) 228-2430 Telephone
(406) 228-2439 FAX
co6593@state.mt.us
Hrichards@state.mt.us

GLASGOW UNIT OFFICE
PO BOX 1007
224 6 STREET SOUTH
GLASGOW, MONTANA 59230-1007

January 5, 2000

MEMORANDUM

TO: Teresa Kinley, Hydro-Geologist, Minerals Management Bureau, Helena Office

FROM: Randy Dirkson, Land Use Specialist, Glasgow Unit Office

RE: Montana Oil & Gas Lease Sale, March 7, 2000

Attached with this memorandum are the comments for the State land tracts that are administered by the NELO, Glasgow Unit Office for the upcoming oil and gas lease sale. If you should have questions, please contact the Glasgow Unit Office.

RECEIVED
JAN 0 7 2000
D.N.R.C.

5079	Nilan Reservoir	20.N	7.W	19	NW4NE4, S2NE4, E2NW4, NE4SW4, SE4	*	400.00
5080	Nilan Reservoir	20.N	7.W	20	E2, W2NW4, SE4NW4, SW4	*	600.00
5081	Nilan Reservoir Augusta	20.N	7.W	28	W2		320.00
5082	Nilan Reservoir	20.N	7.W	29	ALL		640.00
5083	Nilan Reservoir	20.N	7.W	30	NE4		160.00
5084	Nilan Reservoir Augusta	20.N	7.W	33	NE4NE4		40.00
MEAGHER (CLO, FWP-4)							
5047	Lingshire NW	14.N	2.E	4	LOTS 1,2,3,4, S2N2, N2S2, S2SE4		567.32
5048	Lingshire NW B K Ranch	14.N	2.E	8	NW4, S2S2, NW4SE4, S2NE4, NE4NE4		480.00
5049	Lingshire NW	14.N	2.E	10	NW4, SW4SW4, E2SW4, N2SE4, W2NE4		440.00
5050	Lingshire NW	14.N	2.E	16	ALL		640.00
5051	Lingshire NW	14.N	2.E	22	W2, N2SE4, N2NE4		480.00
5052	Lingshire NW	14.N	2.E	26	ALL		640.00
5053	Lingshire NW	14.N	2.E	36	ALL	*	640.00
PONDERA (CLO-C, FWP-4)							
+5056	Lone Man Coulee East	29.N	5.W	36	ALL	*	640.00
RICHLAND (ELO, FWP-6, FWP-7)							
5060	Sidney NE Fairview	23.N	59.E	13	YELLOWSTONE RIVERBED AND RELATED ACREAGE IN S2		124.50
5059	Fairview	23.N	60.E	18	YELLOWSTONE RIVERBED AND RELATED ACREAGE		240.00
ROOSEVELT (NELO-G, FWP-6)							
+5040	**Cedar Coulee**	**27.N**	**57.E**	**10**	**NE4SW4, NE4SE4, S2SE4**	*	**160.00**

All of the land under the described legal description is dryland agriculture with some drainages. The drainages consist of grass waterways of tame and native grass species. This acreage contains minimal habitat for upland birds.

The stream, wetland, etc. buffer strip will be added to this tracts lease.

APP#	TOPO MAP	TWP	RGE	SEC	DESCRIPTION	ACRES

ROSEBUD (ELO, FWP-7)

5061 Birney SW	6.S	41.E	16	ALL	640.00
5062 Birney SW	6.S	41.E	36	LOTS 1,2,3,4, W2E2, W2	638.45
5063 Spring Gulch	7.S	41.E	16	ALL	640.00

SHERIDAN (NELO-G, FWP-6)

5041 Park Lake Dooley SE	36.N	57.E	16	N2	320.00

This tract is native rangeland and has three livestock reservoirs located on the N2 of the section and this tract also contains prairie potholes that are suitable habitat for waterfowl. The reservoirs and the prairie potholes would need to be avoided by any type of surface oil or gas activity. The SE4 of this section contains several teepee rings and rock cairns that would also need to be avoided. The native rangeland also contains habitat types for upland bird and other wildlife species.

STILLWATER (SLO, FWP-5)

The stream, prairie potholes, reservoirs, etc. buffer stip will be added to this tracts lease. ?

The cultural resources stip is added to all tracts.

+5085 Hunter Lake	1.N	21.E	36	ALL	640.00

WIBAUX (ELO, FWP-7)

+5016 Rocking Chair Butte	11.N	58.E	16	ALL	640.00
+5057 Cap Rock	11.N	59.E	16	ALL	640.00
5058 Carlyle NW	11.N	59.E	36	ALL	640.00
5018 Graveyard Hill	12.N	57.E	16	N2, SE4, E2SW4, NW4SW4	600.00
+5021 Hodges SW	13.N	57.E	36	ALL	640.00
+5022 Freeman Creek Hodges	13.N	58.E	16	ALL	640.00
5023 Hodges SE	13.N	58.E	36	ALL	640.00
+5027 Cluster Buttes SE	15.N	58.E	36	W2	320.00

LESSOR: DEPT OF TRANSPORTATION

WIBAUX (ELO, FWP-7)

5012 Carlyle NW	10.N	60.E	2	A TRACT OF LAND IN LOTS 3 AND 4	1.96

* Part or all of the tract is not state-owned surface

MONTANA
Natural Heritage Program
A program of the
NATURAL RESOURCE INFORMATION SYSTEM

P.O. Box 201800 • 1515 East Sixth Avenue • Helena, Montana 59620-1800 • Fax: 406-444-0581 • Phone: 406-444-3009

RECEIVED
JAN 27 2000
D.N.R.C.

January 5, 2000

Teresa Kinley
MT DNRC, Trust Land Management Division
1625 Eleventh Ave.
Helena, Montana 59620-1601

Dear Teresa,

I am writing in response to your request for information on species of special concern in the vicinity of the Proposed Oil & Gas Lease Sale Tracts. We checked our databases for information in these areas. We have enclosed the species of concern reports, organized by township, range and section, for each area and 1 map for each area where these species were found. The results are summarized as follows:

COUNTY	APP#	LOCATION	NUMBER OF OCCURRENCES FOUND
Big Horn	5064-5078	T08S, R42-43E	1
Carbon	5003	T08S, R23E, Section 16	1
Cascade	5042-5046, 5054-5055	T14-15N, R01E; T15N, R02E	1
Dawson	5019-5020,	T13-14N, R57E; T14N, R56E	1
Dawson	5028-5032	T16N, R56-58E	6
Fallon	5001, 5009-5011, 5013-5015, 5017,	T08N, R60E; T09-10N, R59E; T10-11N, R58E; T10N, R60E	0
Hill	5005-5006	T30N, R14E	0
Hill	5008, 5086-5089	T30-31N, R16E; T30N, R17E	0
Hill	5002, 5004	T32-33N, R13E	0
Hill	5007	T36N, R16E, Section 18	1
Lewis & Clark	5079-5084	T20N, R07W	2

COUNTY	APP#	LOCATION	NUMBER OF OCCURRENCES FOUND
Meagher	5047-5053	T14N, R02E	1
Pondera	5056	T29N, R05W, Section 36	1
Richland	5059-5060	T23N, R59-60E	4
Roosevelt	5040	T27N, R57E, Section 10	0
Rosebud	5061-5063	T06-07S, R41E	2
Sheridan	5041	T36N, R57E, Section 16	1
Stillwater	5085	T01N, R21E, Section 36	0
Wibaux	5016, 5018, 5021-5023, 5057-5058	T11N, R58-59E; T12-13N, R57E; T13N, R58E	0
Wibaux	5027	T15N, R58E, Section 36	0
Wibaux	5012	T10N, R60E, Section 2	0

Please keep in mind the following when using and interpreting the enclosed information and maps:

(1) These materials are the result of a search of our database for species of concern and communities that comprise high-quality wetlands, that occur in an area defined by the requested township and range with an additional one-mile buffer surrounding the requested area. This is done to provide you with a more inclusive set of records and to capture records that may be immediately adjacent to the requested area.

(2) In the report, the term "precision" reflects the quality of the location information. S (second) precision is used when the location of the collection/observation is known within a three-second radius (approximately 10 acres); M (minute) precision is used when the location of the collection /observation is known within a one minute radius (approximately 1.5 miles); and G (general) precision is used when the location of the record/collection is known within a 5 mile radius or to a place name only. Some species locations outside the selection area have imprecisely-known locations and may actually occur within the selection area.

(3) Location information for animals represents occupied breeding habitat; location information for plants represents known occurrences of plant species, and, like animals, has an implied range that may not be fully conveyed by the mapped data. Most locations are depicted as points, but some, especially those that cover large area, are depicted as polygons on the map. The approximate boundaries of these polygons are color-coded to help differentiate vertebrate classes and plants.

(4) This report may include sensitive data, and is not intended for general distribution, publication or for use outside of your agency. In particular, public release of specific location information may jeopardize the welfare of threatened, endangered, or sensitive species or communities.

(5) The accompanying map(s) display management status, which may differ from ownership. Also, this report may include data from privately-owned lands, and approval by the landowner is advisable if specific location information is considered for distribution. Features shown on this map do not imply public access to any lands.

(6) Additional biological data for the search area(s) may be available from other sources. We suggest you contact the U.S. Fish and Wildlife Service for any additional information on threatened and endangered species (406-449-5225). Also, significant gaps exist in the Heritage Program's fisheries data, and we suggest you contact the Montana Rivers Information System for information related to your area of interest (406-444-3345).

(7) The results of a data search by the Montana Natural Heritage Program reflect the current status of our data collection efforts. These results are not intended as a final statement on sensitive species within a given area, or as a substitute for on-site surveys, which may be required for environmental assessments.

I hope the enclosed information is helpful to you. Please feel free to contact me at (406)-444-2817 or via my e-mail address, below, should you have any questions or require additional information.

Sincerely,

Martin P. Miller, Data Assistant
Montana Natural Heritage Program
(martinm@state.mt.us)

Montana Natural Heritage Program
P.O. Box 201800
1515 East Sixth Avenue
Helena, Montana 59620-1800
(406)444-3009
http://nris.state.mt.us

Explanation of Element Occurrence Reports

Since 1985, the Montana Natural Heritage Program (MTNHP) has been compiling and maintaining an inventory of the elements of biological diversity in Montana. This inventory includes plant species, animal species, plant communities, and other biological features that are rare, endemic, disjunct, threatened or endangered throughout their range in Montana, vulnerable to extirpation from Montana, or in need of further research.

Individual species, communities, or biological features are referred to as "elements." An "element occurrence" generally falls in one of the following categories:

Plants: A documented location of a plant population. In some instances, adjacent, spatially separated clusters are considered subpopulations and are grouped as one occurrence (e.g., the subpopulations occur in ecologically similar habitats, and are within approximately one air mile of one another).

Animals with limited mobility (most invertebrates, amphibians, reptiles, small mammals, most fish): The location of a specimen collection or of a verified sighting; assumed to represent a breeding population. Additional collections or sightings are often appended to the original record.

Mobile or migratory animals (most birds and larger mammals, some fish): Breeding areas (including nesting territories, dens and leks) and significant aggregation sites (winter feeding areas, staging grounds, or hibernacula).

Communities: All contiguous, high-quality habitat as defined by physical and biological features.

Other: Significant biological features not included in the above categories, such as bird rookeries, peatlands, or state champion trees.

❖

The quantity and quality of data contained in MTNHP reports is dependent on the research and observations of the many individuals and organizations who contribute information to the program.

Please keep in mind that the absence of information for an area does not mean the absence of significant biological features. Reports produced by the Montana Natural Heritage Program summarize information known to the program at the time of a request. These reports are not intended as a final statement on the elements or areas being considered, nor are they a substitute for on-site surveys which may be required for environmental assessments.

As a user of MTNHP, your contributions of data are essential to maintaining the accuracy of our data bases. New or updated location information for all species of special concern is always welcome.

We encourage you to visit our website at http://nris.state.mt.us/mtnhp/. On-line tools include species lists, an electronic version of *Montana Bird Distribution*, and search capabilities by county, management unit, or USGS 7.5' quadrangle. Also available is the *Montana Rare Plant Field Guide*, which contains photos, high-quality diagnostic illustrations, and supporting information for over 300 rare plant species in Montana.

Certain codes and abbreviations are used in element occurrence reports. Although many of these are very straightforward, the following explanations should answer most questions.

Global Rank and State Rank

Taxa are evaluated and ranked by MTNHP on the basis of their global (range-wide) status, and their state-wide status according to a standardized procedure.

For each level of distribution, global and state, species are assigned a numeric rank ranging from 1 (critically imperiled) to 5 (demonstrably secure). For example, Clustered lady's-slipper (*Cypripedium fasciculatum*) is ranked G4 S2. That is, globally the species is apparently secure, while in Montana it is imperiled because of rarity, or because of other factors making it demonstrably vulnerable to extirpation.

Rank Definition

1 Critically imperiled because of extreme rarity, or because of some factor of its biology making it especially vulnerable to extirpation.

2 Imperiled because of rarity, or because of other factors demonstrably making it very vulnerable to extinction throughout its range.

3 Vulnerable because of rarity, or found in a restricted range even though it may be abundant at some of its locations.

4 Apparently secure, though it may be quite rare in parts of its range, especially at the periphery.

5 Demonstrably secure, though it may be quite rare in parts of its range, especially at the periphery.

U Possibly in peril but status uncertain; more information needed.

H Historical, known only from records over 50 years ago; may be rediscovered.

X Believed to be extinct; historical records only.

Other Global and State Rank codes:

T Rank for a subspecies or variety; appended to the global rank for the full species, e.g., G4T3.

Q Taxonomic questions or problems involved; more information needed.

? Inexact or uncertain.

Z Ranking not applicable.

A Accidental in the state. Includes species (usually birds or butterflies) recorded very infrequently, hundreds or thousands of miles outside their usual range.

B A state rank modifier indicating breeding status for a migratory species. Example: S1B, SZN = breeding occurrences for the species are ranked S1 (critically imperiled) in the state; non-breeding occurrences are not ranked in the state.

A modifier to SX or SH: the species has been reintroduced but the population is not yet established.

U. S. Fish And Wildlife Service Endangered Species Act Status

Abbreviations indicate the categories defined in the U.S. Fish and Wildlife Service Notice of Review and indicate the status of a taxon under the federal Endangered Species Act of 1973 (16 U.S.C.A. §1531-1543 (Supp. 1996)).

Note: the categories C2, 3B and 3C are no longer maintained by the U.S. Fish and Wildlife Service (61 FR 7596, Feb. 28, 1996).

Current categories are:

LE listed endangered

LT listed threatened

PE proposed endangered

PT proposed threatened

C candidate: Substantial information exists in U.S. Fish and Wildlife files on biological vulnerability to support

proposals to list as threatened or endangered.

NL not listed or no designation (see below)

XN non-essential experimental population

A species can have more than one federal designation if the species' status varies within its range. In these instances, the Montana designation is listed first. Example: LELT = species is listed as endangered in Montana; elsewhere in its range it is listed as threatened.

U.S. Forest Service Status

The status of species on Forest Service lands as defined by the U.S. Forest Service manual (2670.22). These taxa are listed as such by the Regional Forester (Northern Region) on National Forests in Montana. Species are listed as:

T/E/P listed as Threatened (LT) or Endangered (LE) under the Endangered Species Act or proposed for listing (P), and known or suspected to occur on national forests.

S sensitive species, subspecies or variety, for which the Regional Forester has determined there is a concern for population viability rangewide or in the region.

Bureau of Land Management Status

The status of species on Bureau of Land Management land is defined by the BLM 6840 manual and designated by the Montana State Office of the BLM in 1996:

S sensitive species: proven to be imperiled in at least part of its range and documented to occur on BLM lands.

W watch species: either known to be imperiled and suspected to occur on BLM lands, suspected to be imperiled and documented on BLM lands, or needing further study for other reasons.

Other terms that may be used in this report

USGS quadrangle – Name of the 7.5-minute USGS topographic map(s) where the population is located.

Township, range, section, TRS comments - legal description of the centroid of the population and, if known, additional townships or sections. TRS locators may be based on unsurveyed townships; in such cases, the locators are derived from U. S. Forest Service visitor maps or from BLM surface management status maps. This is done for convenience in describing species locations; the information does not necessarily indicate legal boundaries.

Precision – the level of location accuracy of the record.

S = accuracy of location is within an area of approximately 10 acres

M = accuracy of location is within a radius of approximately 1.5 miles

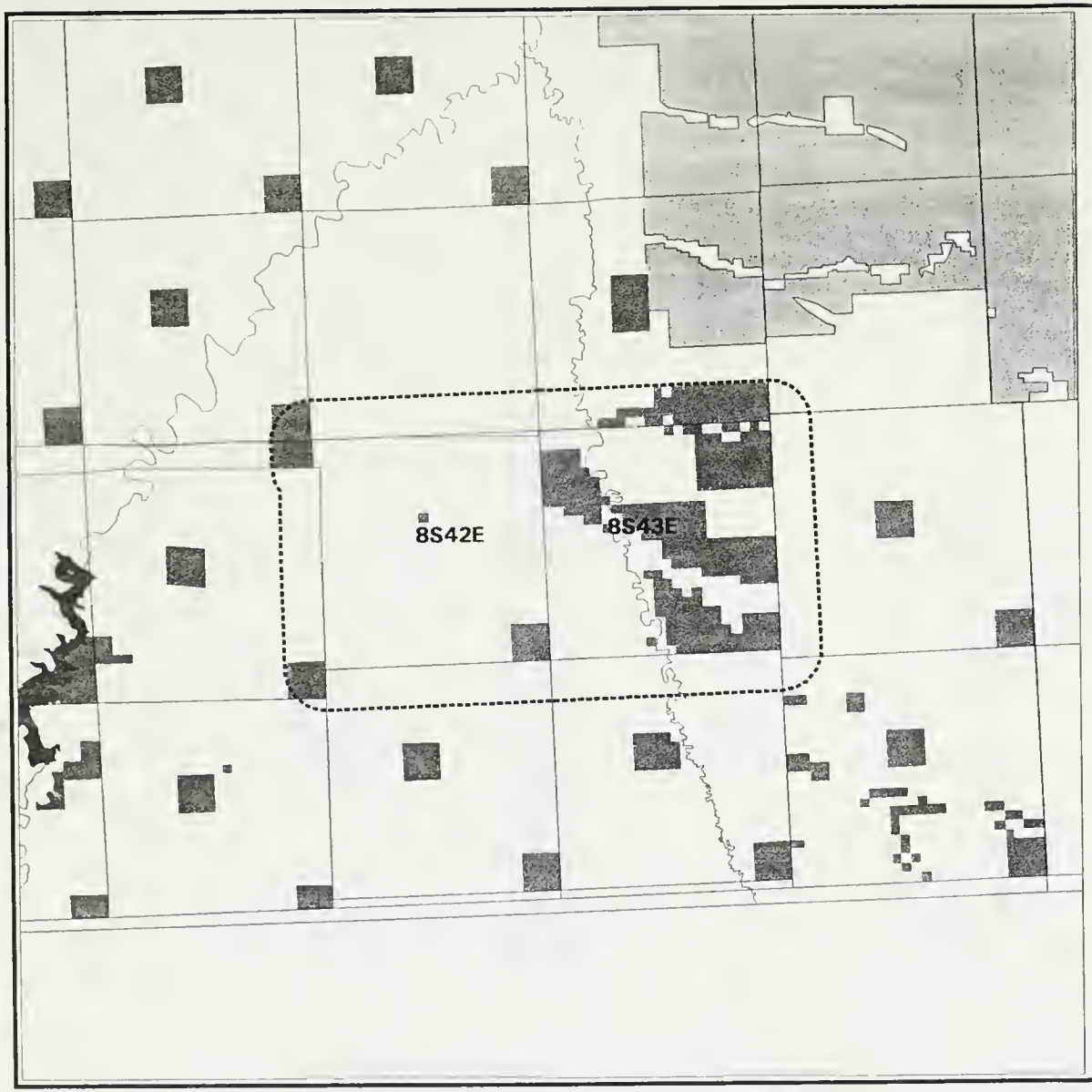
G = location is a place-name only, or within a radius of approximately 5 square miles.

Last observation: date the element was last observed extant at the site (not necessarily the date the site was last visited).

Land Owner/manager – the ownership or management of the land on which the element occurs. Areas are generally listed from smallest to largest. In most instances, this information is derived from U.S. Forest Service visitor maps or from BLM surface management status maps.

Please remember that this report is a summary of information. Additional data are available on most sites and species

If you have questions or need further assistance, please contact us either by phone at (406/444-0914), e-mail (mtnhp@nris.state.mt.us) or at the mailing address shown on the first page.



Montana Species of Special Concern
Oil & Gas Lease Sale
T08S, R42-43E in Big Horn Co.

Species Data

Point Locations

- Animal
- Plant
- Community
- Other

Managed Areas

- Tribal Lands
- BLM special areas
- Other BLM Lands
- National Park Service
- US Fish & Wildlife Service
- National Forests
- Wilderness areas
- Research Natural Areas
- State Trust Lands
- MT Fish, Wildlife & Parks
- Private preserves & conservation easements

Search Area

- Species locations depicted outside the search area have imprecisely-known locations and may actually occur within the search area.
- Not all legend items may occur on map.
- This map displays management status, which may differ from ownership.
- Features shown on this map do not imply public access to any lands.
- Refer to accompanying documentation for full explanation of map features.

Scale of Miles 0 2 4 6 8 10 12 14

Request nhp4077a
January 04, 2000

MONTANA Natural Heritage Program
Natural Resource Information System
Montana State Library
PO Box 201800
Helena, MT 59620-1800
(406) 444-3009

January 5, 2000

Montana Natural Heritage Program
Species of Special Concern: T08S, R42-43E in Big Horn County
Prepared for the MT DNRC Oil & Gas Lease Sale

Scientific Name: ATHENE CUNICULARIA
Common Name: BURROWING OWL

Global rank: G4
State rank: S3B,SZN

Forest Service status: SENSITIVE
USF&WS Endangered Species Act Status:
BLM status: SPECIAL STATUS

Survey site name: HANGING WOMAN CREEK #15

County: BIG HORN

USGS quadrangle: STROUD CREEK

Township:	Range:	Section:	TRS comments:
008S	043E	23	

Application # 5075, T8S, R43E, Sec. 23 contains this site. The stipulation for departmental contact of MT DFWP will be added to this tract's lease.

Precision: M - LOCATION ACCURATE TO APPROX. 1.5 MILES
Elevation: 3600
Last observation: 1980 Size (acres): 0

Location:
FOLLOW COUNTY ROAD CA. 26 MILES ENE FROM DECKER TO HANGING WOMAN CREEK, THEN JEEP TRAIL CA. 3 MILES EAST UP HORSE CREEK.

Element occurrence data:
NEST SITE; FLEDGED 5 YOUNG IN 1979. ACTIVE, BUT NO PRODUCTION DATA IN 1980.

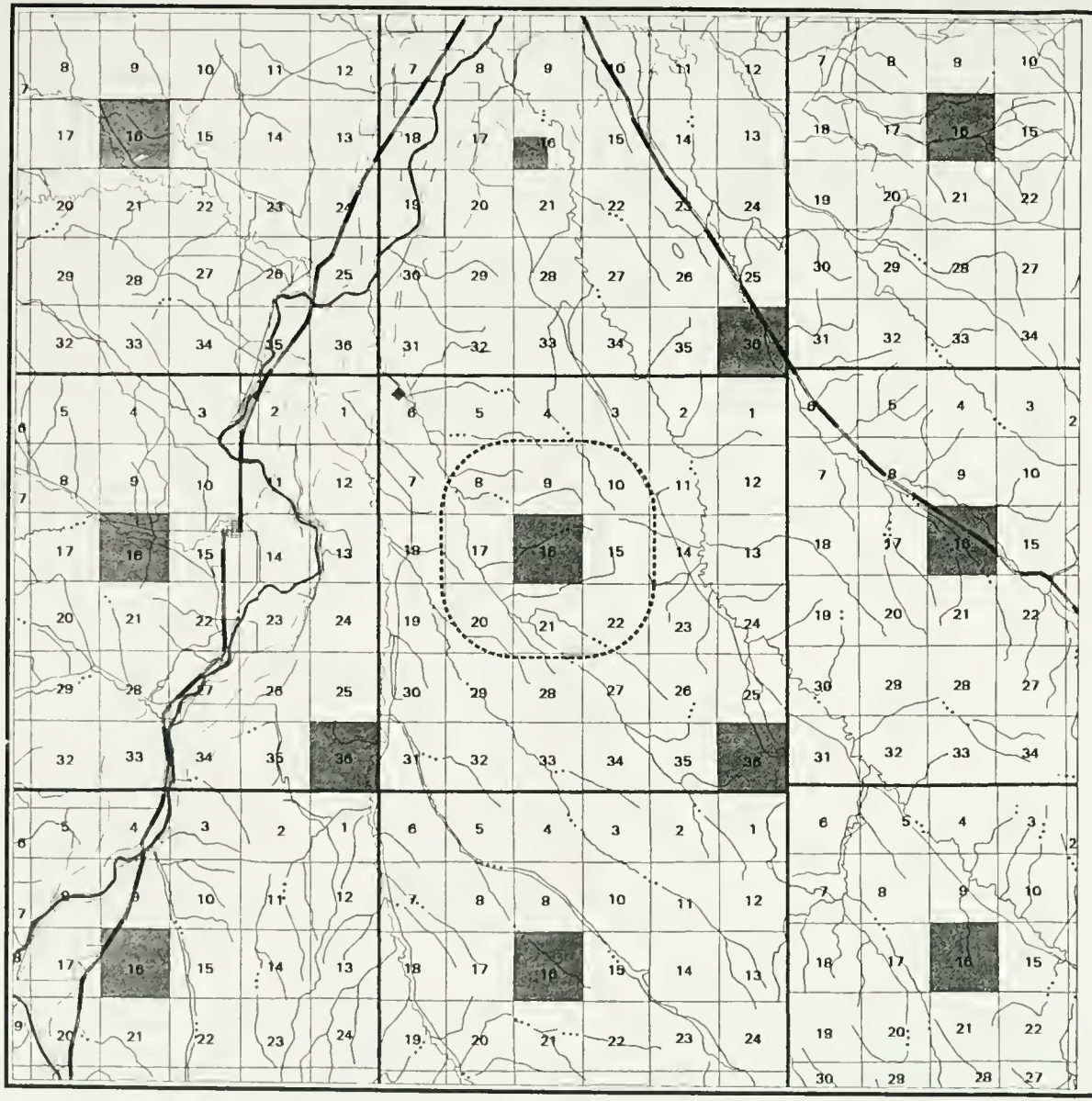
General site description:
LOCATED IN PRAIRIE DOG TOWN.

Land owner/manager:
STATE LAND - UNDESIGNATED

Comments:

Information source: DUBOIS, KRISTI. REGION 4, MONTANA DEPARTMENT OF FISH, WILDLIFE & PARKS. 4600 GIANT SPRINGS ROAD, GREAT FALLS, MT 59406. 406-454-5840.

(MTNHP ref. 004)



Montana Species of Special Concern
Oil & Gas Lease Sale
T08S, R23E, Sec. 16 in Carbon Co.

Species Data

Point Locations

- Animal
- Plant
- Community
- Other

Managed Areas

- Tribal Lands
- BLM special areas
- Other BLM Lands
- National Park Service
- US Fish & Wildlife Service
- National Forests
- Wilderness areas
- Research Natural Areas
- State Trust Lands
- MT Fish, Wildlife & Parks
- Private preserves & conservation easements

Search Area

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Scale of Miles: 0 1 2 3 4 5 6 7

Request nhp4077b
January 04, 2000

MONTANA Natural Heritage Program
Natural Resource Information System
Montana State Library
PO Box 201800
Helena, MT 59620-1800
(406) 444-3009

January 5, 2000

Montana Natural Heritage Program
Species of Special Concern: T08S, R23E, Section 16 in Carbon County
Prepared for the MT DNRC Oil & Gas Lease Sale

Scientific Name: CYNOMYS LEUCURUS
Common Name: WHITE-TAILED PRAIRIE DOG

Global rank: G4
State rank: S1
Forest Service status: SENSITIVE
USF&WS Endangered Species Act Status:
BLM status: SPECIAL STATUS

Survey site name: HUNT CREEK-COLONY #15

County: CARBON

USGS quadrangle: HATCHER PASS

Township:	Range:	Section:	TRS comments:
008S	023E	06	SW4NW4

Application # 5003, T8S, R23E, Sec. 16 is ~2 1/2 - 3 1/2 miles away From this site. The topography is steep and rough. Elevations are higher. Dissimilar habitat - No impact

Precision: M - LOCATION ACCURATE TO APPROX. 1.5 MILES
Elevation: 3870 -
Last observation: 1977- Size (acres): 10

Location:
HWY 308 2 MI N. OF BELFRY. TAKE ACCESS ROAD DUE EAST 2 MI. ROAD WINDS AND ENDS AT BUILDINGS TO SE.

Element occurrence data:
COLONY NO LONGER ACTIVE. 3-10 ACRES ON PRIVATE LAND. 1995: COLONY STILL ACTIVE, 3-4 ACRES IN FALLOW IRRIGATED FIELD.

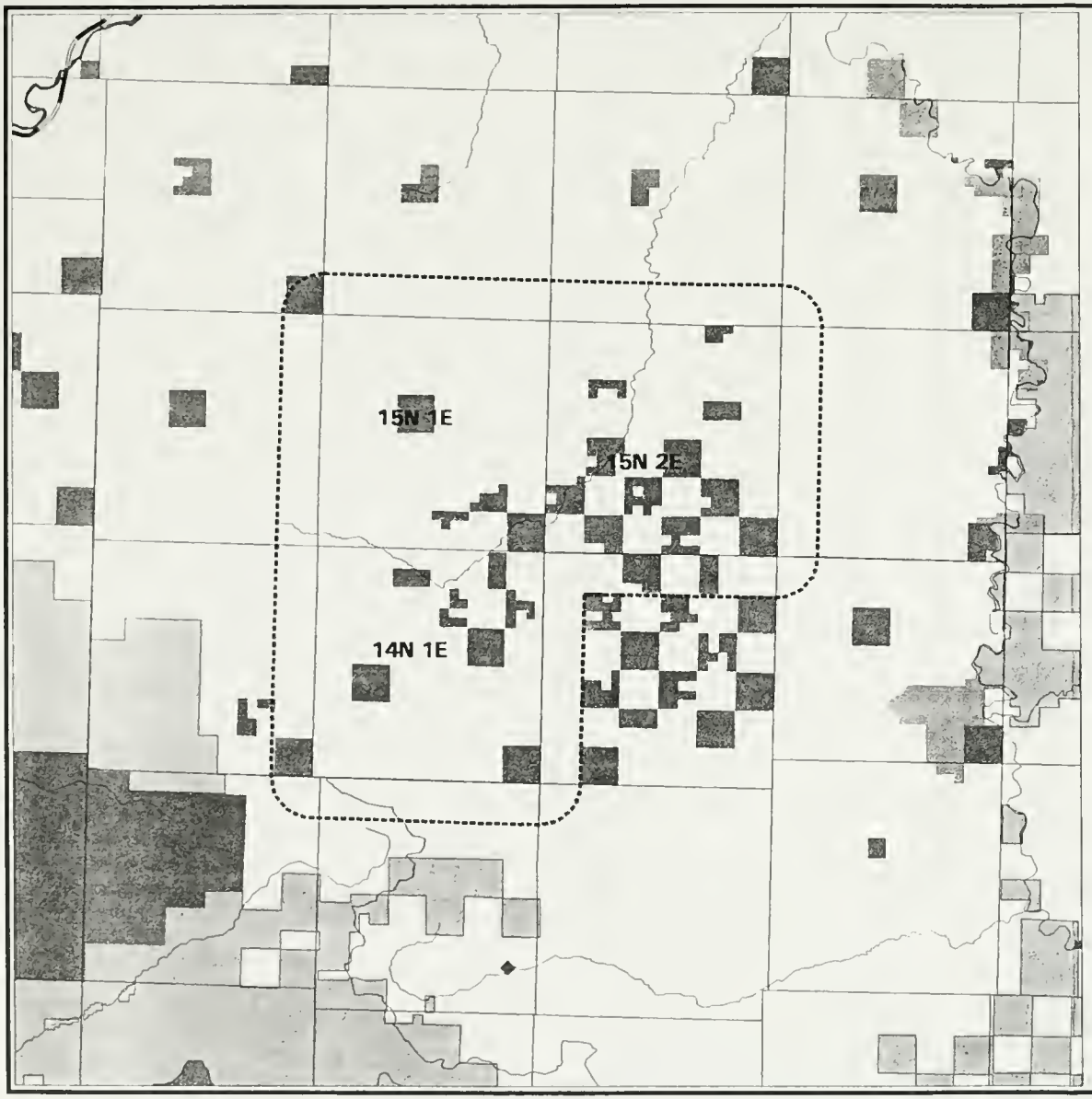
General site description:

Land owner/manager:
PRIVATELY OWNED LAND (INDIVIDUAL OR CORPORATE)

Comments:

Information source: FLATH, DENNIS L. MONTANA DEPARTMENT OF FISH, WILDLIFE AND PARKS, WILDLIFE RESEARCH BUREAU, FWP BUILDING, MONTANA STATE UNIVERSITY CAMPUS, 1400 SOUTH 19TH STREET, BOZEMAN, MT 59717-0001. 406/944-6354.

(MTNHP ref. 015)



Montana Species of Special Concern
Oil & Gas Lease Sale
T14-15N, R01E & T15N, R02E

Species Data

Point Locations

- Animal
- Plant
- Community
- Other

Managed Areas

- Tribal Lands
- BLM special areas
- Other BLM Lands
- National Park Service
- US Fish & Wildlife Service
- National Forests
- Wilderness areas
- Research Natural Areas
- State Trust Lands
- MT Fish, Wildlife & Parks
- Private preserves & conservation easements

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Scale of Miles 0 2 4 6 8 10 12 14

Request nhp4077c
January 04, 2000

MONTANA Natural Heritage Program
Natural Resource Information System
Montana State Library
PO Box 201800
Helena, MT 59620-1800
(406) 444-3009

January 5, 2000

Montana Natural Heritage Program
Species of Special Concern: T14-15N, R01E; T15N, R02E in Cascade County
Prepared for the MT DNRC Oil & Gas Lease Sale

Scientific Name: ONCORHYNCHUS CLARKI LEWISI
Common Name: WESTSLOPE CUTTHROAT TROUT

Global rank: G4T3
State rank: S3

Forest Service status: SENSITIVE
USF&WS Endangered Species Act Status:
BLM status: SPECIAL STATUS

App # 5045 T14N R1E Sec. 14 and
App # 5046 T14N, R1E, Sec. 16 are 8 to 10 miles From this site. It is in a different drainage basin.

Survey site name: FRENCH CREEK

County: MEAGHER

USGS quadrangle: SNEDAKER BASIN

— No impact —
Other tracts in Cascade county are Farther away and not in same drainage basin area. - No impact

Township:	Range:	Section:	TRS comments:
013N	001E	25	

Precision: G - GENERAL LOCATION RECORD; ACCURATE TO APPROX. 5 MILES
Elevation: 5550
Last observation: 1990 Size (acres):

The stream buffer stipulation will be utilized on these tracts as necessary, For water quality, etc.

Location:
FROM LINGSHIRE, ON THE COUNTY ROAD BETWEEN EDEN BRIDGE AND FORT LOGAN, GO WEST UP ROCK CREEK CA. 10 MILES TO FRENCH CREEK.

Element occurrence data:
SAMPLE OF 10 FISH TESTED GENETICALLY PURE BY ELECTROPHORESIS.

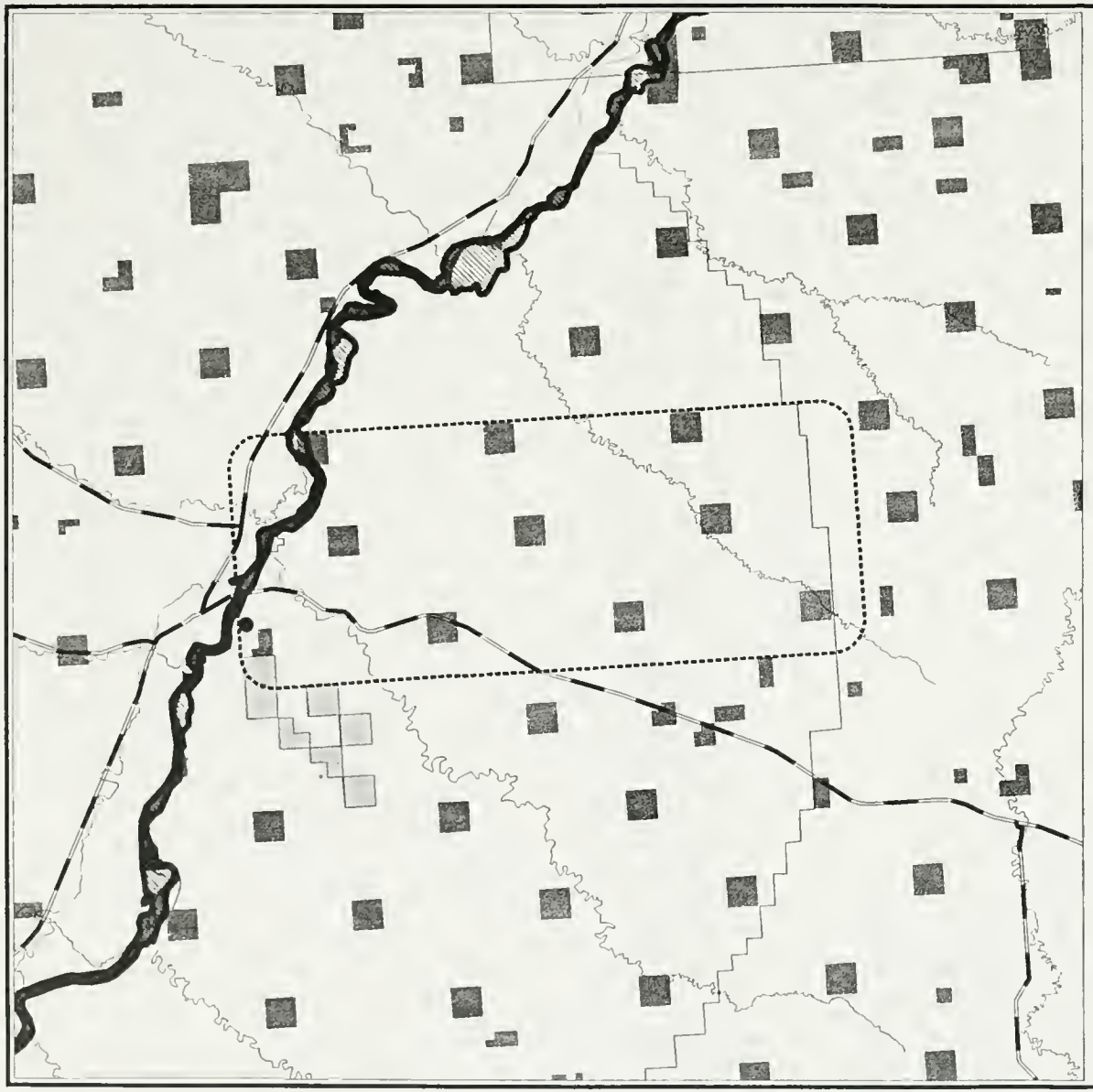
General site description:
STREAM SEGMENT WITH RESIDENT POPULATION.

Land owner/manager:
PRIVATELY OWNED LAND (INDIVIDUAL OR CORPORATE)
HELENA NATIONAL FOREST, HELENA RANGER DISTRICT

Comments:

Information source: LEARY, R. 1992. [LETTER OF 6 MAY TO LEN WALCH, HELENA NATIONAL FOREST, REGARDING RESULTS OF ELECTROPHORETIC ANALYSES OF FISH SAMPLES.]

(MTNHP ref. 178)



Montana Species of Special Concern
Oil & Gas Lease Sale
T16N, R56-58E in Dawson County

Species Data

Point Locations
- Animal
- Plant
- Community
- Other

Populations covering large areas
- Fluvial Occurrences (Fish, Birds, &/or Herps)

Managed Areas
- Tribal Lands
- BLM special areas
- Other BLM Lands
- National Park Service
- US Fish & Wildlife Service
- National Forests
- Wilderness areas
- Research Natural Areas
- State Trust Lands
- MT Fish, Wildlife & Parks
- Private preserves & conservation easements

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Scale of Miles: 0 5 10 15

Request nhp4077e
January 04, 2000

MONTANA Natural Heritage Program
Natural Resource Information System
Montana State Library
PO Box 201800
Helena, MT 59620-1800
(406) 444-1009

January 5, 2000

Montana Natural Heritage Program
Species of Special Concern: T16N, R56-58E in Dawson County
Prepared for the MT DNRC Oil & Gas Lease Sale

Scientific Name: CELASTRUS SCANDENS
Common Name: BITTERSWEET

Global rank: G5
State rank: S1

Forest Service status:
USF&WS Endangered Species Act Status:
BLM status: WATCH

Survey site name:

App. No. 5029, T16N, R56E, Sec. 16 is about 2-4 miles From this site. Tract has higher elevation and more rugged topography, on the site (but Falls within 2100-2500 Ft range noted more trees line ridges rather than riparian areas on Internet data

County: DAWSON

USGS quadrangle: GLENDIVE

Township:	Range:	Section:	TRS comments:
016N	055E	25	

The site could be in the riparian area of the yellowstone river that cuts the Section 25.

Precision: G - GENERAL LOCATION RECORD; ACCURATE TO APPROX. 5 MILES
Elevation: 2100
Last observation: 1975- - Size (acres): 0

The river does not cut the tract (App No. 5029).

Location:
GLENDIVE AREA.

Element occurrence data:
UNKNOWN.

- Dissimilar habitat and distance From site - No impact

General site description:
UNKNOWN.

Land owner/manager:
PRIVATELY OWNED LAND (INDIVIDUAL OR CORPORATE)

Comments:
RECEIVED BY COOP. EXT. SERVICE.

Details of habitat on MTNHP website indicate it occurs in riparian woodlands and thickets on the plains.

Information source: BOTANIST, MONTANA NATURAL HERITAGE PROGRAM, 1515 EAST SIXTH AVENUE, HELENA, MT 59620-1800.

(MTNHP ref. 001)

January 5, 2000

Montana Natural Heritage Program
Species of Special Concern: T16N, R56-58E in Dawson County
Prepared for the MT DNRC Oil & Gas Lease Sale

Scientific Name: MENTZELIA NUDA
Common Name: BRACTLESS MENTZELIA

Global rank: G5
State rank: S1

Forest Service status:
USF&WS Endangered Species Act Status:
BLM status: WATCH

Survey site name: GLENDIVE

County: DAWSON

USGS quadrangle: GLENDIVE

App. No. 5029 T16N R56E Sec. 16 is about 2-4 miles From this site. Tract has higher elevation and more rugged topography. (less badlands type) More trees are present on ridges. No trees are noted for the site. Only the badlands part of the site has a similar elevation to the tract. Geologic differences in Formations are noted from statemap 3 prelim Glendive 1x2° map. Cretaceous Hell Creek & Quaternary Alluvium in Sections 25 & 36, T16N, R55E & small amount of Quaternary deposit is also present. The Fort Union is Tertiary and is located in Sec. 16, T16N, R56E. It has a volcanic source. Another Quaternary deposit is also present. - Sighting is over 100 yrs old

Township:	Range:	Section:	TRS comments:
016N	055E	25	36

Precision: G - GENERAL LOCATION RECORD; ACCURATE TO APPROX. 5 MILES
Elevation: 2100
Last observation: 1892-07- Size (acres): 0

Location:
GLENDIVE.

Element occurrence data:
UNKNOWN.

General site description:
"DEEP SLIGHT" SOIL.

Land owner/manager:
PRIVATELY OWNED LAND (INDIVIDUAL OR CORPORATE)
STATE LAND - UNDESIGNATED

Comments:
ANNOTATED FROM M. ORNATA. 2 MORE SPECIMENS COLLECTED FROM SAME GENERAL AREA.

Differences in habitat and distance From site. - No impact.

Details of habitat on MTNHP website indicate it occurs in sandy or gravelly soil of open hills and roadsides on the plains.

Information source: BOTANIST, MONTANA NATURAL HERITAGE PROGRAM, 1515 EAST SIXTH AVENUE, HELENA, MT 59620-1800.

(MTNHP ref. 001)

January 5, 2000

Montana Natural Heritage Program
Species of Special Concern: T16N, R56-58E in Dawson County
Prepared for the MT DNRC Oil & Gas Lease Sale

Scientific Name: STERNA ANTILLARUM ATHALASSOS
Common Name: INTERIOR LEAST TERN

Global rank: G4T2Q
State rank: S1B,SZN

Forest Service status:
USF&WS Endangered Species Act Status: LE
BLM status: SPECIAL STATUS

Survey site name: LOWER YELLOWSTONE RIVER

County: RICHLAND
DAWSON
WIBAUX
PRAIRIE
CUSTER

Application # 5028, T16N, R56E Sec. 5, Yellowstone riverbed and related acreage will have the navigable riverbeds, no surface occupancy stipulation added to its lease. - No impact.

USGS quadrangle: (EXTENDS OVER NUMEROUS QUADS)

Township:	Range:	Section:	TRS comments:
013N	052E	00	CENTROID--OCCURRENCE EXTENDS OVER NUMEROUS TO

Precision: G - GENERAL LOCATION RECORD; ACCURATE TO APPROX. 5 MILES
Elevation: 1970 - 2240
Last observation: 1995-07 Size (acres):

Location:
YELLOWSTONE RIVER BETWEEN MILES CITY AND SAVAGE.

Element occurrence data:
BREEDING AREA WITH CA. 10-40 ADULTS, UP TO 18 NESTS AND UP TO 45 HATCHLINGS REPORTED EACH YEAR. NEST INITIATION OCCURS MID-JUNE TO EARLY JULY. THE BOUNDARIES FOR THIS OCCURRENCE ENCOMPASS ALL REPORTED TERN SIGHTINGS ON THE YELLOWSTONE RIVER. SPECIFIC OBSERVATION DATA AVAILABLE FROM MTNHP.

General site description:
LARGE RIVER WITH CHANNEL BARS AND ISLANDS USED FOR NESTING.

Land owner/manager:
PRIVATELY OWNED LAND (INDIVIDUAL OR CORPORATE)
BLM: MILES CITY FIELD OFFICE

Comments:
MOST BREEDING ACTIVITY LOCATED BETWEEN FALLON AND GLENDIVE. BIRDS ALSO NEST ON THE NORTH DAKOTA PORTION OF THE RIVER. NEST INITIATION DATES MAY VARY WITH RUN-OFF PATTERNS.

Information source: ZOOLOGIST, MONTANA NATURAL HERITAGE PROGRAM, 1515 EAST SIXTH AVENUE, P.O. BOX 210800, HELENA, MT 59620-1800. 406/444-3009.

(MTNHP ref. 003)

January 5, 2000

Montana Natural Heritage Program
Species of Special Concern: T16N, R56-58E in Dawson County
Prepared for the MT DNRC Oil & Gas Lease Sale

Scientific Name: BIRD ROOKERY
Common Name: BIRD ROOKERY

Global rank: Z
State rank: Z
Forest Service status:
USF&WS Endangered Species Act Status:
BLM status:

Survey site name: GLENDIVE - ROOK

County: DAWSON

USGS quadrangle: STIPEK

Township:	Range:	Section:	TRS comments:
016N	056E	18	NW4

Precision: M - LOCATION ACCURATE TO APPROX. 1.5 MILES
Elevation: 2060
Last observation: 1988-06-15 Size (acres):

Application #5028, T16N, R56E, Sec. 5 Yellowstone riverbed and related acreage will have the navigable riverbeds, no surface occupancy stipulation added to its lease. It is ~1-2 miles away From this site.

Application # 5029 T16N, R56E, Sec. 16 is ~1 to 2 miles away From this site. It is not along the river and has dissimilar habitat. - No impact.

Location:
ON THE YELLOWSTONE RIVER, ON THE NORTH EDGE OF GLENDIVE.

Element occurrence data:
GREAT BLUE HERON. 29 NESTS, 25 OCCUPIED IN MID-JUNE.

General site description:
INTERMITTENT ISLAND.

Land owner/manager:
PRIVATELY OWNED LAND (INDIVIDUAL OR CORPORATE)

Comments:
NONE.

Information source: LAVELLE, D. 1988. 1988 NONGAME SURVEYS IN REGION 5 AND REGION 7. MONTANA DEPARTMENT OF FISH, WILDLIFE, AND PARKS. [UNPUBLISHED REPORT].

(MTNHP ref. 029)

January 5, 2000

Montana Natural Heritage Program
Species of Special Concern: T16N, R56-58E in Dawson County
Prepared for the MT DNRC Oil & Gas Lease Sale

Scientific Name: SCAPHIRHYNCHUS ALBUS
Common Name: PALLID STURGEON

Global rank: G1G2
State rank: S1

Forest Service status:
USF&WS Endangered Species Act Status: LE
BLM status: SPECIAL STATUS

Survey site name: LOWER MISSOURI & YELLOWSTONE RIVERS

County: CUSTER
DAWSON
MCCONE
PRAIRIE
RICHLAND
ROOSEVELT
VALLEY

Application # 5028, T16N R56E, Sec. 5 Yellowstone Riverbed and related acreage will have the Navigable riverbeds, No-surface occupancy stipulation added to its lease.

USGS quadrangle:

Township: Range: Section: TRS comments:

Precision: U - UNMAPPABLE RECORD
Elevation: 1860 - 2380
Last observation: 1994 Size (acres): 0

Location:
THE MISSOURI RIVER BELOW FORT PECK DAM AND THE YELLOWSTONE RIVER BELOW MILES CITY.

Element occurrence data:
THIS EO IS BASED ON RECORDS OF FISH TAGGED AT FORT PECK BEING FOUND UP THE YELLOWSTONE, AND COLLECTIONS OF INDIVIDUALS AT NUMEROUS POINTS ALONG BOTH RIVERS. HIGHEST USE AREA APPEARS TO BE IN THE YELLOWSTONE RIVER BELOW THE INTAKE DIVERSION DAM AND, IN NORTH DAKOTA, THE MISSOURI RIVER FROM THE CONFLUENCE WITH THE YELLOWSTONE DOWNSTREAM TO THE HEADWATERS OF LAKE SACACAWEA. THE MONTANA PORTION OF THE YELLOWSTONE RIVER IS USED PRIMARILY IN THE SPRING AND SUMMER. POPULATION ESTIMATES ARE NOT AVAILABLE; BUT CATCH DATA OVER THE PAST SEVERAL DECADES SUGGEST SIGNIFICANT DECLINES.

General site description:
BROAD RIVERS WITH MODERATE CURRENT AND MANY STRETCHES WITH SANDY BOTTOM.

Land owner/manager:
PRIVATELY OWNED LAND (INDIVIDUAL OR CORPORATE)
FORT PECK INDIAN RESERVATION
PIROGUE ISLAND STATE NATURAL PARK

Comments:
THIS OCCURRENCE SPANS SEVERAL HUNDRED RIVER MILES ON 53 7.5 MINUTE QUADS. SEE SUB-EOs *A01 & *B01 FOR DETAILED LOCATION IDENTIFIERS.

January 5, 2000

Montana Natural Heritage Program
Species of Special Concern: T16N, R56-58E in Dawson County
Prepared for the MT DNRC Oil & Gas Lease Sale

Information source: U.S. FISH AND WILDLIFE SERVICE. 1993. PALLID STURGEON RECOVERY PLAN. U.S. FISH AND WILDLIFE SERV., BISMARCH, N.D. 55 PP.

(MTNHP ref. 001)

January 5, 2000

Montana Natural Heritage Program
Species of Special Concern: T16N, R56-58E in Dawson County
Prepared for the MT DNRC Oil & Gas Lease Sale

Scientific Name: TRIONYX SPINIFERUS
Common Name: SPINY SOFTSHELL

Global rank: G5
State rank: S3
Forest Service status:
USF&WS Endangered Species Act Status:
BLM status: SPECIAL STATUS

Survey site name: YELLOWSTONE RIVER DRAINAGE

County: DAWSON
PRAIRIE
CUSTER
ROSEBUD
BIG HORN
TREASURE
YELLOWSTONE

Application # 5028, T16N, R56E, Sec. 5 Yellowstone Riverbed and related acreage will have the navigable riverbeds, no surface occupancy stipulation added to its lease.

USGS quadrangle:

Township:	Range:	Section:	TRS comments:
006N	039E	17	CENTRUM - MANY ADDITIONAL TOWNSHIPS

Precision: G - GENERAL LOCATION RECORD; ACCURATE TO APPROX. 5 MILES
Elevation: 1980 - 3100
Last observation: 1997 Size (acres): 0

Location:
THE YELLOWSTONE RIVER BETWEEN BILLINGS AND INTAKE, PLUS THE TONGUE RIVER AND THE FIRST FEW MILES OF THE POWDER RIVER.

Element occurrence data:
SINCE 1970: 4 REPORTS ON THE YELLOWSTONE, 5 REPORTS ON THE TONGUE AND ONE ON THE POWDER. THE BOUNDARIES FOR THIS OCCURRENCE ENCOMPASS ALL REPORTED OBSERVATIONS IN THE YELLOWSTONE RIVER DRAINAGE. SPECIFIC OBSERVATION DATA AVAILABLE FROM MTNHP.

General site description:
LARGE RIVERS AND THEIR SANDY BANKS (UP TO 50 METERS FROM WATER - USED FOR NESTING).

Land owner/manager:
BLM: MILES CITY FIELD OFFICE
BLM: BILLINGS FIELD OFFICE
BLM: MILES CITY FIELD OFFICE
PRIVATELY OWNED LAND (INDIVIDUAL OR CORPORATE)
STATE LAND - UNDESIGNATED

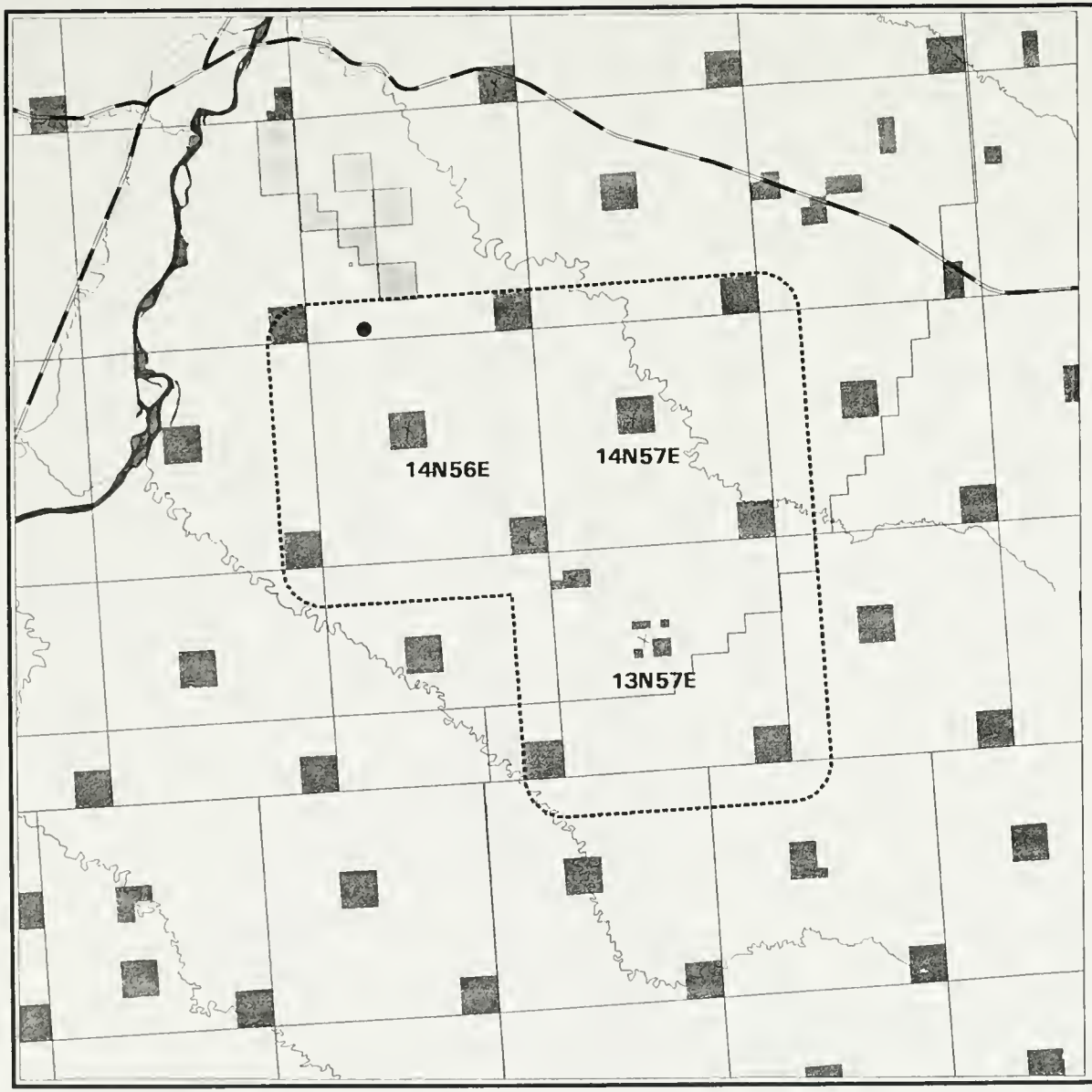
Comments:
NOTE 3 HISTORIC REPORTS FROM THE BIG HORN RIVER DRAINAGE, AROUND CROW AGENCY. (POD: 7.4.1, 7.4.2, 7.9.82)

Information source: ZOOLOGIST, MONTANA NATURAL HERITAGE PROGRAM, 1515 EAST SIXTH AVENUE, P.O. BOX 210800, HELENA, MT 59620-1800. 406/444-3009.

January 5, 2000

Montana Natural Heritage Program
Species of Special Concern: T16N, R56-58E in Dawson County
Prepared for the MT DNRC Oil & Gas Lease Sale

(MTNHP ref. 001)



Montana Species of Special Concern
Oil & Gas Lease Sale
T13-14N, R57E & T14N, R56E

Species Data

Point Locations

- Animal
- Plant
- Community
- Other

Managed Areas

- Tribal Lands
- BLM special areas
- Other BLM Lands
- National Park Service
- US Fish & Wildlife Service
- National Forests
- Wilderness areas
- Research Natural Areas
- State Trust Lands
- MT Fish, Wildlife & Parks
- Private preserves & conservation easements

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Scale of Miles 0 2 4 6 8 10 12 14

Request nhp4077d
January 04, 2000

MONTANA Natural Heritage Program
Natural Resource Information System
Montana State Library
PO Box 201800
Helena, MT 59620-1800
(406) 444-3009 nrishp@state.mt.us

January 5, 2000

Montana Natural Heritage Program
Species of Special Concern: T13-14N, R57E; T14N, R56E in Dawson County
Prepared for the MT DNRC Oil & Gas Lease Sale

Scientific Name: NUTTALLANTHUS TEXANUS
Common Name: BLUE TOADFLAX

Global rank: G4G5 Forest Service status:
State rank: S1 USF&WS Endangered Species Act Status:
BLM status: WATCH

Survey site name: MAKOSHIKA STATE PARK

County: DAWSON

USGS quadrangle: GLENDIVE

Township: Range: Section: TRS comments:
015N 056E 32

Precision: M - LOCATION ACCURATE TO APPROX. 1.5 MILES
Elevation: 2080
Last observation: 1982-06-30 Size (acres):

Location:
MAKOSHIKA STATE PARK, JUST EAST OF GLENDIVE.

Element occurrence data:
UNKNOWN.

General site description:
DISTURBED GRASSLAND.

Land owner/manager:
MAKOSHIKA STATE PARK
PRIVATELY OWNED LAND (INDIVIDUAL OR CORPORATE)
BLM: MILES CITY FIELD OFFICE

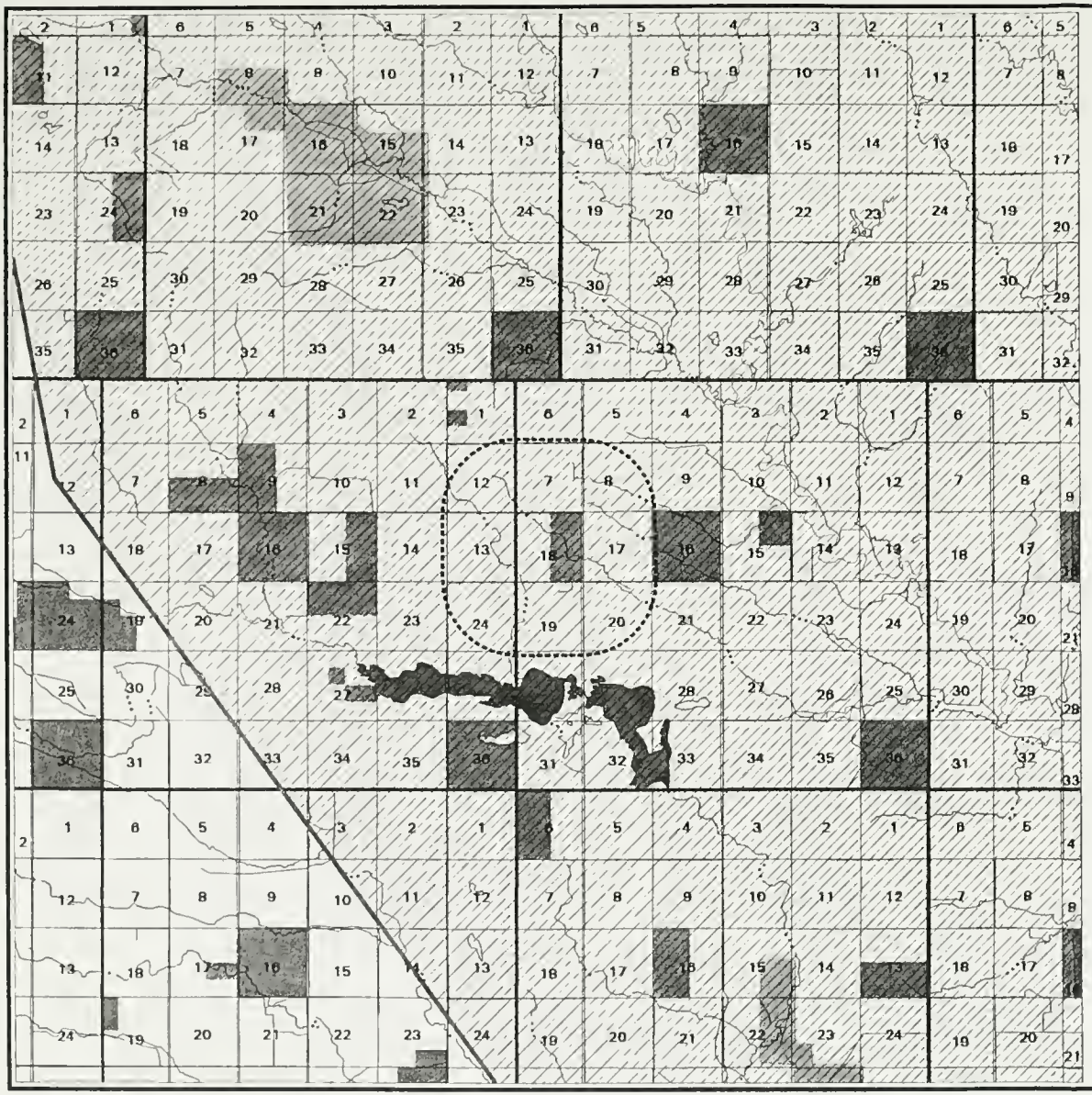
Comments:
SOUGHT BY CHRIS LORENTZ AND JEAN TOTEBUSCH IN JUNE 1998 - NOT FOUND. POSSIBLE EXPLANATIONS: NO LONGER EXTANT, GRAZING BY SHEEP AND CATTLE IN THE DAYS PRIOR TO SEARCH, OR POOR YEAR IN THE DRY CONDITIONS OF THE 1998 SPRING MONTHS.

Information source: BOTANIST, MONTANA NATURAL HERITAGE PROGRAM, 1515 EAST SIXTH AVENUE, HELENA, MT 59620-1800.

(MTNHP ref. 002)

Application # (5024) T 14N, R56E Sec. 16 is ~2 - 3 miles From this site. This tract has saline uplands, badlands and thin, hilly, habitat with pockets of Juniper,

Distance From site and dissimilar habitat - No impact



Montana Species of Special Concern
Oil & Gas Lease Sale
T36N, R16E, Sec. 18 in Hill County

Species Data

Point Locations
- Animal
- Plant
- Community
- Other

Populations covering large areas
- Mammals

Managed Areas
- Tribal Lands
- BLM special areas
- Other BLM Lands
- National Park Service
- US Fish & Wildlife Service
- National Forests
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Scale of Miles: 0 1 2 3 4 5 6 7

Request nhp4077j
January 04, 2000

MONTANA Natural Heritage Program
Natural Resource Information System
Montana State Library
PO Box 201800
Helena, MT 59620-1800
(406) 444-3009

January 5, 2000

Montana Natural Heritage Program
Species of Special Concern: T36N, R16E, Section 18 in Hill County
Prepared for the MT DNRC Oil & Gas Lease Sale

Scientific Name: VULPES VELOX
Common Name: SWIFT FOX

Global rank: G3
State rank: S1

Forest Service status: SENSITIVE
USF&WS Endangered Species Act Status: C
BLM status: SPECIAL STATUS

Survey site name: BORDER PRAIRIE

App. # 5007, T36N, R16E, Sec. 18, E2 is within the swift fox area. The wildlife survey stip will be added to this tract's lease.

County: VALLEY
PHILLIPS
BLAINE
HILL

USGS quadrangle: (EXTENDS OVER NUMEROUS QUADS)

Township:	Range:	Section:	TRS comments:
037N	018E	00	CENTROID--OCCURRENCE EXTENDS OVER MANY TOWNSH

Precision: G - GENERAL LOCATION RECORD; ACCURATE TO APPROX. 5 MILES
Elevation: -
Last observation: 1996 Size (acres):

Location:
A VERY LARGE AREA MOSTLY NORTH OF THE MILK RIVER FROM CHINOOK TO HINSDALE AND EXTENDING TO CANADA.

Element occurrence data:
LIMITED DATA AVAILABLE; BUT PROBABLY AT LEAST 4 BREEDING PAIRS ARE PRESENT. THE BOUNDARIES FOR THIS OCCURRENCE ENCOMPASS ALL REPORTED OBSERVATIONS LOCATED WITHIN 20 KM OF ONE ANOTHER. SPECIFIC OBSERVATION DATA AVAILABLE FROM MTNHP.

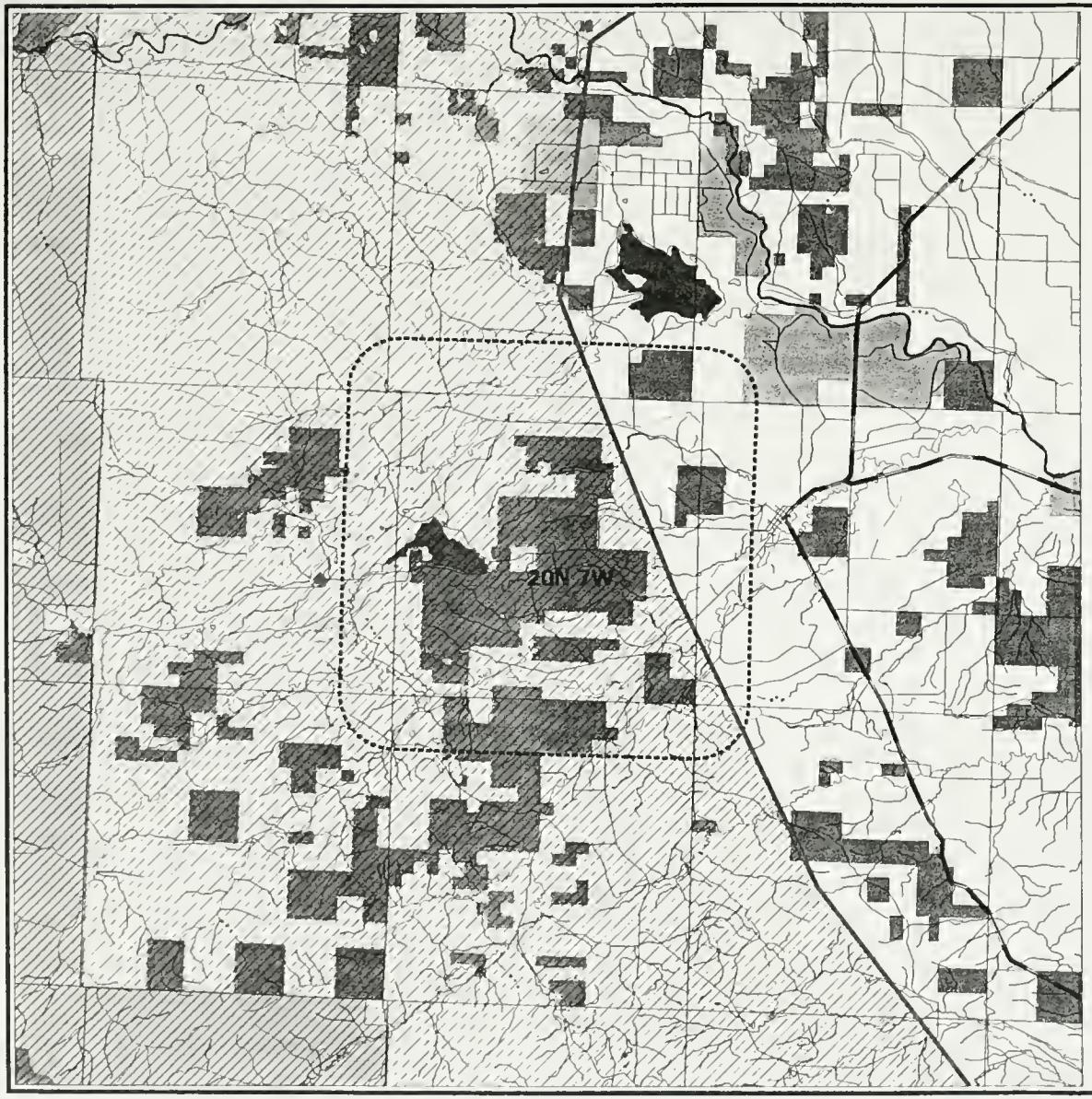
General site description:
ROLLING, GLACIATED MIXED-GRASS PRAIRIE WITH LIMITED SHRUB.

Land owner/manager:
PRIVATELY OWNED LAND (INDIVIDUAL OR CORPORATE)
BLM: LEWISTOWN FIELD OFFICE
FORT BELKNAP INDIAN RESERVATION

Comments:
41 OBSERVATIONS IN THE 1980S AND 1990S, INCLUDING 5 OF PUPS OR JUVENILES.

Information source: ZOOLOGIST, MONTANA NATURAL HERITAGE PROGRAM, 1515 EAST SIXTH AVENUE, P.O. BOX 210800, HELENA, MT 59620-1800. 406/444-3009.

(MTNHP ref. 001)



Montana Species of Special Concern
Oil & Gas Lease Sale
T20N, R07W in Lewis & Clark County

Species Data

Point Locations
- Animal
- Plant
- Community
- Other

Populations covering large areas
- Mammals

Managed Areas
- Tribal Lands
- BLM special areas
- Other BLM Lands
- National Park Service
- US Fish & Wildlife Service
- National Forests
- Wilderness areas
- Research Natural Areas
- State Trust Lands
- MT Fish, Wildlife & Parks
- Private preserves & conservation easements

Search Area

- Species locations depicted outside the search area have imprecisely-known locations and may actually occur within the search area.
- Not all legend items may occur on map.
- This map displays management status, which may differ from ownership.
- Features shown on this map do not imply public access to any lands.
- Refer to accompanying documentation for full explanation of map features.

Scale of Miles: 0 2 4 6 8 10

Request nhp4077k
January 04, 2000

MONTANA Natural Heritage Program

Natural Resource Information System
Montana State Library
PO Box 201800
Helena, MT 59620-1800
(406) 444-3009

January 5, 2000

Montana Natural Heritage Program
Species of Special Concern: T20N, R07W in Lewis & Clark County
Prepared for the MT DNRC Oil & Gas Lease Sale

Scientific Name: CYGNUS BUCCINATOR
Common Name: TRUMPETER SWAN

Global rank: G4
State rank: S2B,S2N

Forest Service status: SENSITIVE
USF&WS Endangered Species Act Status:
BLM status: SPECIAL STATUS

Survey site name: ANDERSON LAKE

County: LEWIS AND CLARK

USGS quadrangle: NILAN RESERVOIR

Township: 020N Range: 008W Section: 23 TRS comments:

Precision: M - LOCATION ACCURATE TO APPROX. 1.5 MILES
Elevation: 4524
Last observation: 1988-06-28 Size (acres): 0

Location:
FROM AUGUSTA, FOLLOW THE BENCHMARK ROAD (#235) CA. 11 MILES WEST TO ANDERSON LAKE.

Element occurrence data:
ADULT PAIR WITH 2 CYGNETS OBSERVED.

General site description:
UNKNOWN.

Land owner/manager:
PRIVATELY OWNED LAND (INDIVIDUAL OR CORPORATE)

Comments:
NONE.

Information source: JONES, CEDRON. MONTANA NATURAL HERITAGE PROGRAM, 1515 EAST SIXTH AVENUE, P.O. BOX 201800, HELENA, MT 59620-1800.

(MTNHP ref. 007)

Application Nos. 5079 and 5080 ~~adj~~ are partly covered by Nilan Reservoir. These tracts in T20N R7W Sec 19 and 20 are about 1½ to 3½ miles From this site.

The Rocky Mountain Front sensitive areas stipulation will be added to the leases of these tracts. This will cover concerns for the swans should they utilize the Reservoir.

The other tracts in Lewis and Clark County (App # 5081-5084) will also have the Rocky Mountain Front stipulation added to their leases. This will cover other smaller bodies of water that the swans might utilize.

January 5, 2000

Montana Natural Heritage Program
Species of Special Concern: T20N, R07W in Lewis & Clark County
Prepared for the MT DNRC Oil & Gas Lease Sale

Scientific Name: URSUS ARCTOS HORRIBILIS
Common Name: GRIZZLY BEAR

Global rank: G4T3
State rank: S1S2

Forest Service status: THREATENED
USF&WS Endangered Species Act Status: LT
BLM status: SPECIAL STATUS

Survey site name: NORTHERN CONTINENTAL DIVIDE in Lewis and Clark County

Application Nos. 5079 thru 5084 are located within this grizzly bear area. The Rocky Mountain Front sensitive areas stipulation will be added to the leases of these tracts.

County: FLATHEAD
GLACIER
PONDERA
TETON
LEWIS AND CLARK
POWELL
MISSOULA
LAKE

USGS quadrangle:

Township: Range: Section: TRS comments:

Precision: U - UNMAPPABLE RECORD
Elevation: 3200 - 10400
Last observation: Size (acres):

Location:
THIS RECORD ENCOMPASSES AN AREA FROM CANADA SOUTH TO STATE HIGHWAY 200, AND FROM EAST FRONT TO SWAN AND STILLWATER RIVERS.

Element occurrence data:
OCCUPIED HABITAT. THIS OCCURRENCE IS APPARENTLY SEPARATED FROM THAT IN THE MISSION MOUNTAINS TO THE EAST AND BECOMING ISOLATED FROM POPULATIONS IN CANADA TO THE NORTH. THE POPULATION IS ESTIMATED AT 549-813 BEARS WITH A MINIMUM OF 306 BEARS (INCLUDING THE MISSION MOUNTAINS PORTION), ACCORDING TO THE U.S. FISH AND WILDLIFE SERVICE. FROM 1987-1992, THE AVERAGE KNOWN HUMAN-CAUSED MORTALITY WAS 11.3 BEARS/YEAR, ACCORDING TO THE U.S. FISH AND WILDLIFE SERVICE. THE BOUNDARIES FOR THIS OCCURRENCE ARE SLIGHTLY MODIFIED FROM THE RECOVERY ZONE BOUNDARY TO INCLUDE AREAS WHERE BEARS ARE REPEATEDLY OBSERVED.

General site description:
GRIZZLIES USE A WIDE RANGE OF HABITATS, FROM LOW-ELEVATION RIPARIAN AREAS TO ALPINE AND TALUS SLOPES.

Land owner/manager:
SCAPEGOAT WILDERNESS
BOB MARSHALL WILDERNESS
GREAT BEAR WILDERNESS
GLACIER NATIONAL PARK
FLATHEAD NATIONAL FOREST
LEWIS & CLARK NATIONAL FOREST
HELENA NATIONAL FOREST

January 5, 2000

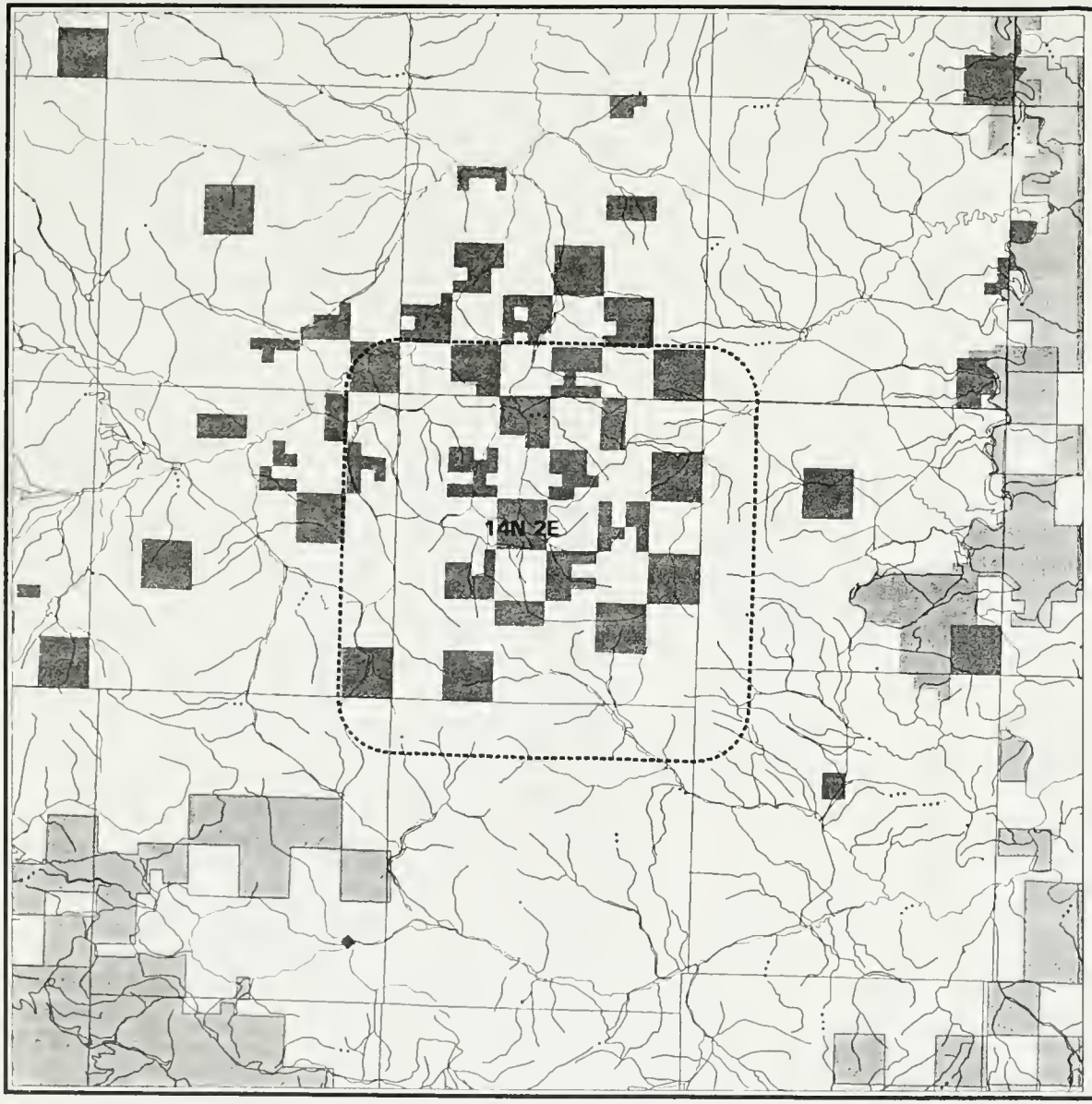
Montana Natural Heritage Program
Species of Special Concern: T20N, R07W in Lewis & Clark County
Prepared for the MT DNRC Oil & Gas Lease Sale

LOLO NATIONAL FOREST
CORPORATE TIMBERLANDS
PRIVATELY OWNED LAND (INDIVIDUAL OR CORPORATE)
STATE LAND - UNDESIGNATED
CONSERVATION EASEMENT: THE NATURE CONSERVANCY
CONSERVATION EASEMENT: THE NATURE CONSERVANCY
CONSERVATION EASEMENT: MONTANA LAND RELIANCE
UNIVERSITY OF MONTANA LAND - BANDY RANCH
CONSERVATION EASEMENT: THE NATURE CONSERVANCY
SWAN RIVER OXBOW PRESERVE

Comments:
"OCCUPIED HABITAT" IS BASED ON THE RECOVERY ZONE BOUNDARY AND THE PROFESSIONAL JUDGEMENT OF THE MTNHP ZOOLOGIST. (THE RECOVERY ZONE BOUNDARY AND BEAR MANAGEMENT UNITS ARE AVAILABLE FROM MTNHP.)

Information source: SERVHEEN, C. 1993. GRIZZLY BEAR RECOVERY PLAN. UNPUBLISHED REPORT TO THE U.S. FWS. UNIVERSITY OF MONTANA, MISSOULA. 181 PP.

(MTNHP ref. 008)



Montana Species of Special Concern
Oil & Gas Lease Sale
T14N, R02E in Meagher County

Species Data

Point Locations

- Animal
- Plant
- Community
- Other

Managed Areas

- Tribal Lands
- BLM special areas
- Other BLM Lands
- National Park Service
- US Fish & Wildlife Service
- National Forests
- Wilderness areas
- Research Natural Areas
- State Trust Lands
- MT Fish, Wildlife & Parks
- Private preserves & conservation easements

------ Search Area

- Species locations depicted outside the search area have imprecisely-known locations and may actually occur within the search area.
- Not all legend items may occur on map.
- This map displays management status, which may differ from ownership.
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- Refer to accompanying documentation for full explanation of map features.

Scale of Miles 0 2 4 6 8 10

Request nhp4077l
January 04, 2000

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Natural Resource Information System
Montana State Library
PO Box 201800
Helena, MT 59620-1800
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January 5, 2000

Montana Natural Heritage Program
Species of Special Concern: T14N, R02E in Meagher County
Prepared for the MT DNRC Oil & Gas Lease Sale

Scientific Name: ONCORHYNCHUS CLARKI LEWISI
Common Name: WESTSLOPE CUTTHROAT TROUT

Global rank: G4T3
State rank: S3

Forest Service status: SENSITIVE
USF&WS Endangered Species Act Status:
BLM status: SPECIAL STATUS

Survey site name: FRENCH CREEK

County: MEAGHER

USGS quadrangle: SNEDAKER BASIN

Township:	Range:	Section:	TRS comments:
013N	001E	25	

Application # 5052, T14N, R2E, Sec 26 is ~6 to 8 miles away From this site. Streams on the tract are tributary to the same main stream. The stream buffer stipulation will be added to this tract's lease For this Fish and other concerns.

Precision: G - GENERAL LOCATION RECORD; ACCURATE TO APPROX. 5 MILES
Elevation: 5550
Last observation: 1990 Size (acres):

Location:
FROM LINGSHIRE, ON THE COUNTY ROAD BETWEEN EDEN BRIDGE AND FORT LOGAN, GO WEST UP ROCK CREEK CA. 10 MILES TO FRENCH CREEK.

Element occurrence data:
SAMPLE OF 10 FISH TESTED GENETICALLY PURE BY ELECTROPHORESIS.

General site description:
STREAM SEGMENT WITH RESIDENT POPULATION.

Land owner/manager:
PRIVATELY OWNED LAND (INDIVIDUAL OR CORPORATE)
HELENA NATIONAL FOREST, HELENA RANGER DISTRICT

Comments:

Information source: LEARY, R. 1992. [LETTER OF 6 MAY TO LEN WALCH, HELENA NATIONAL FOREST, REGARDING RESULTS OF ELECTROPHORETIC ANALYSES OF FISH SAMPLES.]

(MTNHP ref. 178)

Montana Species of Special Concern
Oil & Gas Lease Sale
T29N, R05W, Sec. 36 in Pondera Co.

Species Data

Point Locations
- Animal
- Plant
- Community
- Other

Populations covering large areas
- Birds

Managed Areas
- Tribal Lands
- BLM special areas
- Other BLM Lands
- National Park Service
- US Fish & Wildlife Service
- National Forests
- Wilderness areas
- Research Natural Areas
- State Trust Lands
- MT Fish, Wildlife & Parks
- Private preserves & conservation easements

Search Area

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- Not all legend items may occur on map.
- This map displays management status, which may differ from ownership.
- Features shown on this map do not imply public access to any lands.
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Scale of Miles: 0 1 2 3 4 5 6 7

Request nhp4077m
January 04, 2000

MONTANA Natural Heritage Program
Natural Resource Information System
Montana State Library
PO Box 201800
Helena, MT 59620-1800
(406) 444-3009

January 5, 2000

Montana Natural Heritage Program
Species of Special Concern: T29N, R05W, Section 36 in Pondera County
Prepared for the MT DNRC Oil & Gas Lease Sale

Scientific Name: BUTEO REGALIS
Common Name: FERRUGINOUS HAWK

Global rank: G4 Forest Service status:
State rank: S3B,SZN USF&WS Endangered Species Act Status:
BLM status: SPECIAL STATUS

Survey site name: SOUTH OF VALIER

County: PONDERA

USGS quadrangle: VALIER EAST
LONE MAN COULEE WEST
LONE MAN COULEE EAST
SAM GEORGE HILL

App. No. 5056, T29N, R5W, Sec 36 is located in this ferruginous hawk area. The wildlife survey stipulation will be added to this tract's lease.

Township:	Range:	Section:	TRS comments:
029N	005W	00	
029N	004W	00	
028N	005W	00	
028N	004W	00	

Precision: G - GENERAL LOCATION RECORD; ACCURATE TO APPROX. 5 MILES
Elevation: -
Last observation: 1997-05 Size (acres):

Location:
SOUTH OF VALIER.

Element occurrence data:
HIGH CONCENTRATION OF HAWKS IN THIS AREA. CA. 6 BREEDING PAIRS OBSERVED IN 1997 WITH CA. 10 ALTERNATE NESTS. (SPECIFIC OBSERVATION DATA AVAILABLE FROM MTNHP.)

General site description:

Land owner/manager:
PRIVATELY OWNED LAND (INDIVIDUAL OR CORPORATE)
STATE LAND - UNDESIGNATED

Comments:
FULL EXTENT OF OCCUPIED BREEDING HABITAT IS UNKNOWN.

Information source: DUBOIS, KRISTI. REGION 4, MONTANA DEPARTMENT OF FISH, WILDLIFE & PARKS. 4600 GIANT SPRINGS ROAD, GREAT FALLS, MT 59406. 406-454-5840.

(MTNHP ref. 017)

Montana Species of Special Concern
Oil & Gas Lease Sale
T23N, R59-60E in Richland County

Species Data

Point Locations
- Animal
- Plant
- Community
- Other

Populations covering large areas
- Fluvial Occurrences (Fish, Birds, &/or Herps)

Managed Areas
- Tribal Lands
- BLM special areas
- Other BLM Lands
- National Park Service
- US Fish & Wildlife Service
- National Forests
- Wilderness areas
- Research Natural Areas
- State Trust Lands
- MT Fish, Wildlife & Parks
- Private preserves & conservation easements

- Search Area

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Scale of Miles: 0 2 4 6 8 10

Request nhp4077n
January 04, 2000

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Natural Resource Information System
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(406) 444-3009

January 5, 2000

Montana Natural Heritage Program
Species of Special Concern: T23N, R59-60E in Richland County
Prepared for the MT DNRC Oil & Gas Lease Sale

Scientific Name: SCAPHIRHYNCHUS ALBUS
Common Name:. PALLID STURGEON

Global rank: G1G2
State rank: S1

Forest Service status:
USF&WS Endangered Species Act Status: LE
BLM status: SPECIAL STATUS

Survey site name: LOWER MISSOURI & YELLOWSTONE RIVERS

County: CUSTER
DAWSON
MCCONE
PRAIRIE
RICHLAND
ROOSEVELT
VALLEY

Application Numbers 5059 and 5060:
T23N, R60E, Sec 18 and
T23N R59E, Sec. 13 will have the
navigable riverbed no surface occupancy stip
added to their leases.

USGS quadrangle:

Township: Range: Section: TRS comments:

Precision: U - UNMAPPABLE RECORD
Elevation: 1860 - 2380
Last observation: 1994 Size (acres): 0

Location:
THE MISSOURI RIVER BELOW FORT PECK DAM AND THE YELLOWSTONE RIVER BELOW MILES CITY.

Element occurrence data:
THIS EO IS BASED ON RECORDS OF FISH TAGGED AT FORT PECK BEING FOUND UP THE YELLOWSTONE, AND COLLECTIONS OF INDIVIDUALS AT NUMEROUS POINTS ALONG BOTH RIVERS. HIGHEST USE AREA APPEARS TO BE IN THE YELLOWSTONE RIVER BELOW THE INTAKE DIVERSION DAM AND, IN NORTH DAKOTA, THE MISSOURI RIVER FROM THE CONFLUENCE WITH THE YELLOWSTONE DOWNSTREAM TO THE HEADWATERS OF LAKE SACACAWEA. THE MONTANA PORTION OF THE YELLOWSTONE RIVER IS USED PRIMARILY IN THE SPRING AND SUMMER. POPULATION ESTIMATES ARE NOT AVAILABLE; BUT CATCH DATA OVER THE PAST SEVERAL DECADES SUGGEST SIGNIFICANT DECLINES.

General site description:
BROAD RIVERS WITH MODERATE CURRENT AND MANY STRETCHES WITH SANDY BOTTOM.

Land owner/manager:
PRIVATELY OWNED LAND (INDIVIDUAL OR CORPORATE)
FORT PECK INDIAN RESERVATION
PIROGUE ISLAND STATE NATURAL PARK

Comments:
THIS OCCURRENCE SPANS SEVERAL HUNDRED RIVER MILES ON 53 7.5 MINUTE QUADS. SEE SUB-EOs *A01 & *B01 FOR DETAILED LOCATION IDENTIFIERS.

January 5, 2000

Montana Natural Heritage Program
Species of Special Concern: T23N, R59-60E in Richland County
Prepared for the MT DNRC Oil & Gas Lease Sale

Information source: U.S. FISH AND WILDLIFE SERVICE. 1993. PALLID STURGEON RECOVERY PLAN. U.S. FISH AND WILDLIFE SERV., BISMARCH, N.D. 55 PP.

(MTNHP ref. 001)

January 5, 2000

Montana Natural Heritage Program
Species of Special Concern: T23N, R59-60E in Richland County
Prepared for the MT DNRC Oil & Gas Lease Sale

Scientific Name: CORYNORHINUS TOWNSENDII
Common Name: TOWNSEND'S BIG-EARED BAT

Global rank: G4
State rank: S2S3

Forest Service status: SENSITIVE
USF&WS Endangered Species Act Status:
BLM status: SPECIAL STATUS

Survey site name: SIDNEY MINE

App. No. 5060 T23N R59E Sec 13 and App. No 5059 T23N R60E Sec 18 are ~5-5½ miles away. These are riverbed and related acreage tracts. Dissimilar habitat → No impact to navigable rivers's non-surface

County: RICHLAND

USGS quadrangle: SIDNEY

Township:	Range:	Section:	TRS comments:
022N	059E	15	

These tracts will have the occupancy stip added to their leases - For water quality and other concerns.

Precision: G - GENERAL LOCATION RECORD; ACCURATE TO APPROX. 5 MILES
Elevation: 2000
Last observation: 1977- Size (acres): 0

Location:
FROM SIDNEY, TAKE STATE HWY 200/16 ABOUT ONE MILE SOUTH; TAKE ST HWY 23 ABOUT 1.75 MILES EAST. SITE IS TO THE NORTH OF HWY. 23 AND SOUTHEAST OF IMPROVED LIGHTDUTY ROAD.

Element occurrence data:
5 INDIVIDUALS HIBERNATING; ONE COLLECTED.

General site description:
ABANDONED COAL MINE IN BREAKS ALONG RIVER.

Land owner/manager:
PRIVATELY OWNED LAND (INDIVIDUAL OR CORPORATE)

Comments:

Information source: SWENSON, JON E. BIOLOGIST. MONTANA DEPARTMENT OF FISH, WILDLIFE AND PARKS. 1001 RIDGEWAY DR., LIVINGSTON, MT 59047. 406/222-2674.

(MTNHP ref. 003)

January 5, 2000

Montana Natural Heritage Program
Species of Special Concern: T23N, R59-60E in Richland County
Prepared for the MT DNRC Oil & Gas Lease Sale

Scientific Name: ZAPUS HUDSONIUS
Common Name: MEADOW JUMPING MOUSE

Global rank: G5
State rank: S2S3

Forest Service status:
USF&WS Endangered Species Act Status:
BLM status: SPECIAL STATUS

Survey site name: CRANE-N

County: RICHLAND

USGS quadrangle: SIDNEY

App. No. 5059 T23N, R60E, Sec 18 and App. No. 5060 T23N, R59E, Sec. 13 are about 6-7 miles away. These tracts could have similar habitat. The navigable rivers no surface occupancy stipulation will be added to these tracts lease for this and other concerns.

Township:	Range:	Section:	TRS comments:
022N	059E	19	(Site is west of Yellowstone River)

Precision: G - GENERAL LOCATION RECORD; ACCURATE TO APPROX. 5 MILES
Elevation: 1910
Last observation: 1979-08-01 Size (acres): 0

Location:
4.5 MILES SOUTH OF SIDNEY.

Element occurrence data:
ONE FEMALE SPECIMEN COLLECTED

General site description:

Land owner/manager:
PRIVATELY OWNED LAND (INDIVIDUAL OR CORPORATE)

Comments:

Information source: ZOOLOGIST, MONTANA NATURAL HERITAGE PROGRAM, 1515 EAST SIXTH AVENUE, P.O. BOX 210800, HELENA, MT 59620-1800. 406/444-3009.

(MTNHP ref. 002)

January 5, 2000

Montana Natural Heritage Program
Species of Special Concern: T23N, R59-60E in Richland County
Prepared for the MT DNRC Oil & Gas Lease Sale

Scientific Name: LOBELIA SPICATA
Common Name: PALE-SPIKED LOBELIA

Global rank: G5
State rank: S1

Forest Service status:
USF&WS Endangered Species Act Status:
BLM status:

Survey site name: SIDNEY

County: RICHLAND

USGS quadrangle: SIDNEY

Application No. 5060: T23N, R59E Sec. 13 and Application No. 5059 T23N, R60E Sec 18 are ~3 to 5 miles away)

Township:	Range:	Section:	TRS comments:
023N	059E	28	

Precision: G - GENERAL LOCATION RECORD; ACCURATE TO APPROX. 5 MILES
Elevation: 1930
Last observation: 1924-08-25 Size (acres):

This site has a higher elevation and is not as wet as the riverbed and related acreage tracts. Dissimilar habitat - No impact -

Location:
SIDNEY.

Element occurrence data:
IN FLOWER.

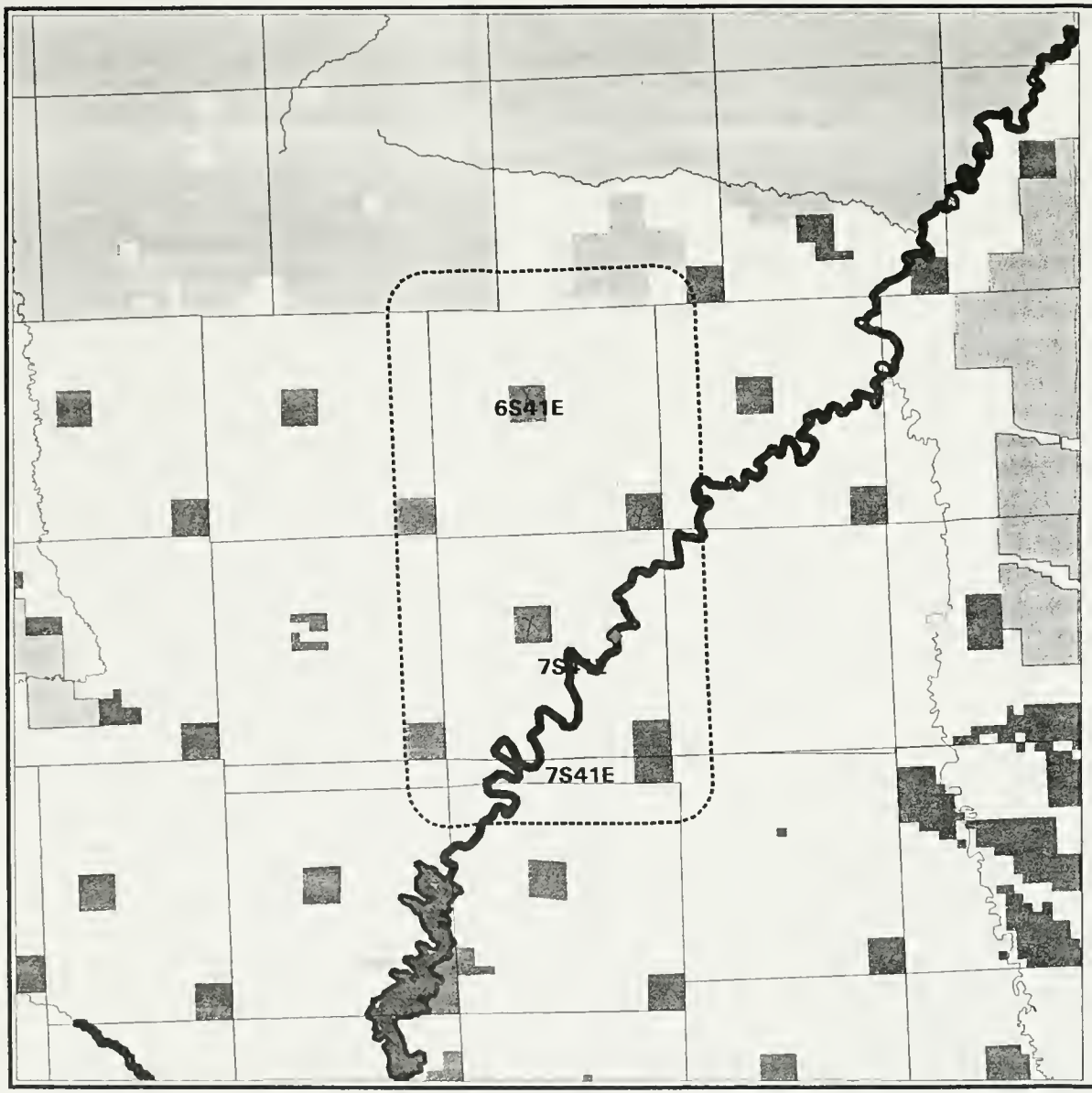
General site description:

Land owner/manager:
PRIVATELY OWNED LAND (INDIVIDUAL OR CORPORATE)
STATE LAND - UNDESIGNATED

Comments:
Original specimen is at MONT with collector initials; accession or collector number 1886.

Information source: BOTANIST, MONTANA NATURAL HERITAGE PROGRAM, 1515 EAST SIXTH AVENUE, HELENA, MT 59620-1800.

(MTNHP ref. 001)



Montana Species of Special Concern
Oil & Gas Lease Sale
T06-07S, R41E in Rosebud County

Species Data

Point Locations
- Animal
- Plant
- Community
- Other

Populations covering large areas
- Fluvial Occurrences (Fish, Birds, &/or Herps)

Managed Areas
- Tribal Lands
- BLM special areas
- Other BLM Lands
- National Park Service
- US Fish & Wildlife Service
- National Forests
- Wilderness areas
- Research Natural Areas
- State Trust Lands
- MT Fish, Wildlife & Parks
- Private preserves & conservation easements

- Search Area

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Scale of Miles: 0 2 4 6 8 10 12 14

Request nhp4077p
January 04, 2000

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Natural Resource Information System
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(406) 444-3009

January 5, 2000

Montana Natural Heritage Program
Species of Special Concern: T06-07S, R41E in Rosebud County
Prepared for the MT DNRC Oil & Gas Lease Sale

Scientific Name: HALIAEETUS LEUCOCEPHALUS
Common Name: BALD EAGLE

Global rank: G4
State rank: S3B,S3N

Forest Service status: THREATENED
USF&WS Endangered Species Act Status: LT
BLM status: SPECIAL STATUS

Survey site name: TONGUE

County: ROSEBUD

USGS quadrangle: SPRING GULCH

Township:	Range:	Section:	TRS comments:
007S	041E	14	

Precision: M - LOCATION ACCURATE TO APPROX. 1.5 MILES
Elevation: 3250
Last observation: 1997 Size (acres):

Location:
ALONG THE TONGUE RIVER, CA. 12 MILES SOUTHWEST OF BIRNEY.

Element occurrence data:
RESULTS OF ANNUAL NEST SURVEYS ON FILE AT MTNHP.

General site description:
NEST SITE AND TERRITORY.

Land owner/manager:
PRIVATELY OWNED LAND (INDIVIDUAL OR CORPORATE)
BLM: MILES CITY FIELD OFFICE

Comments:

Information source: FLATH, D. 1997. [MEMO LISTING LOCATION OF BALD EAGLE NESTS AS OF AUGUST, 1997.] UNPUBLISHED REPORT. 10PP.

(MTNHP ref. 146)

App. No. 5063, T7S, R41E, Sec. 16 is ~1½ to 2½ miles from this site. This is outside the 1 mile buffer zone recommended by Dennis Flath (previous conversation) and the MT Board of Oil and Gas Conservation Programmatic EA. However the SE corner of the tract is about ½ mile away from the Tongue River. The eagles could move at some point. The departmental contact of MT-DFWP stip. will be added to this tract's lease to check on any change in location of the eagles.

January 5, 2000

Montana Natural Heritage Program
Species of Special Concern: T06-07S, R41E in Rosebud County
Prepared for the MT DNRC Oil & Gas Lease Sale

Scientific Name: TRIONYX SPINIFERUS
Common Name: SPINY SOFTSHELL

Global rank: G5
State rank: S3

Forest Service status:
USF&WS Endangered Species Act Status:
BLM status: SPECIAL STATUS

Survey site name: YELLOWSTONE RIVER DRAINAGE

County: DAWSON
PRAIRIE
CUSTER
ROSEBUD
BIG HORN
TREASURE
YELLOWSTONE

App. No. 5062, T6S, R41E, Sec 36 and App. No 5063, T7S, R41E Sec. 16 are more than 150 Ft. From the Tongue River.

Dissimilar habitat - No impact

USGS quadrangle:

Township:	Range:	Section:	TRS comments:
006N	039E	17	CENTRUM - MANY ADDITIONAL TOWNSHIPS

Precision: G - GENERAL LOCATION RECORD; ACCURATE TO APPROX. 5 MILES
Elevation: 1980 - 3100
Last observation: 1997 Size (acres): 0

Location:
THE YELLOWSTONE RIVER BETWEEN BILLINGS AND INTAKE, PLUS THE TONGUE RIVER AND THE FIRST FEW MILES OF THE POWDER RIVER.

Element occurrence data:
SINCE 1970: 4 REPORTS ON THE YELLOWSTONE, 5 REPORTS ON THE TONGUE AND ONE ON THE POWDER. THE BOUNDARIES FOR THIS OCCURRENCE ENCOMPASS ALL REPORTED OBSERVATIONS IN THE YELLOWSTONE RIVER DRAINAGE. SPECIFIC OBSERVATION DATA AVAILABLE FROM MTNHP.

General site description:
LARGE RIVERS AND THEIR SANDY BANKS (UP TO 50 METERS FROM WATER - USED FOR NESTING).

Land owner/manager:
BLM: MILES CITY FIELD OFFICE
BLM: BILLINGS FIELD OFFICE
BLM: MILES CITY FIELD OFFICE
PRIVATELY OWNED LAND (INDIVIDUAL OR CORPORATE)
STATE LAND - UNDESIGNATED

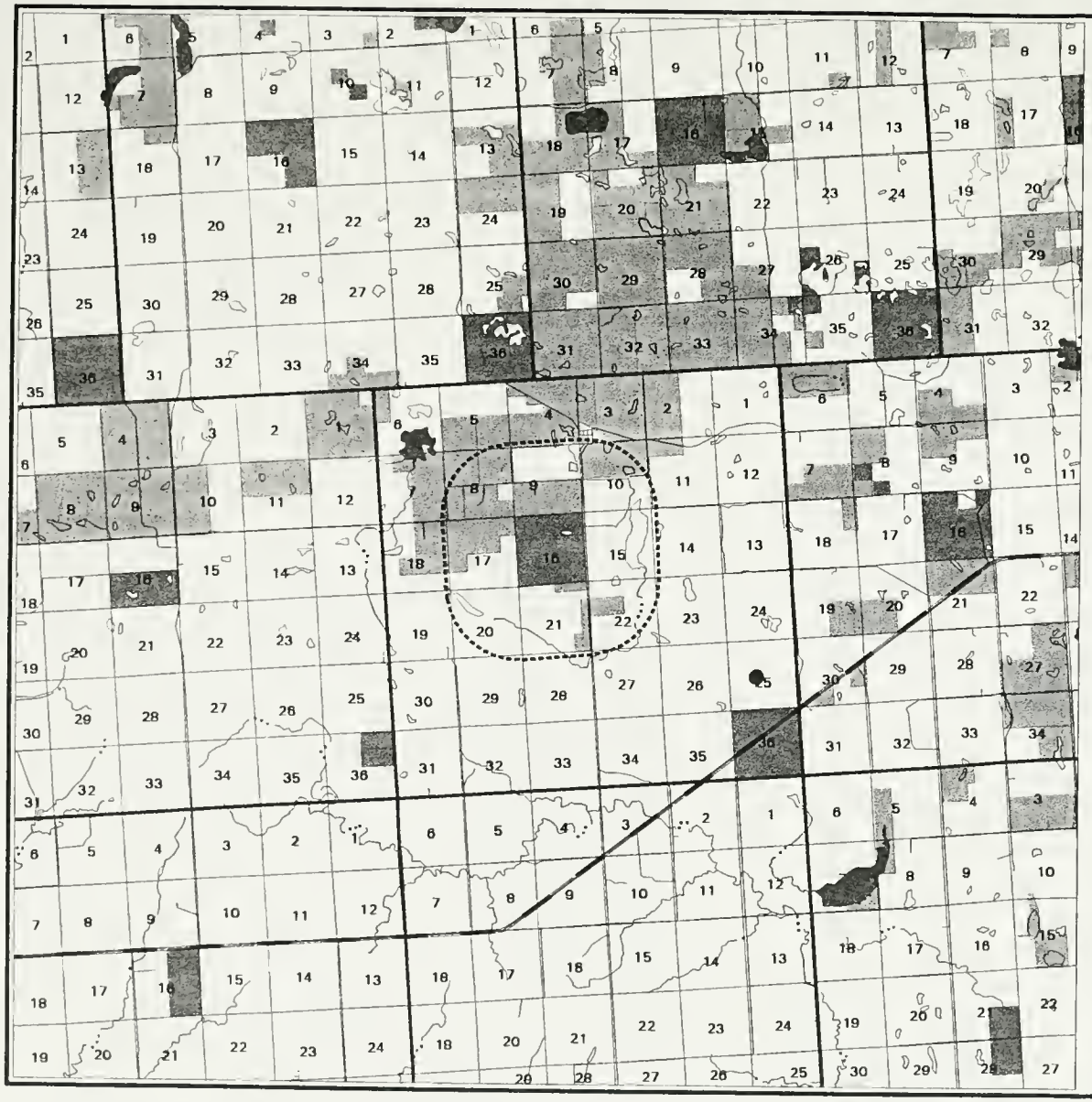
Comments:
NOTE 3 HISTORIC REPORTS FROM THE BIG HORN RIVER DRAINAGE, AROUND CROW AGENCY. (POD: 7.4.1, 7.4.2, 7.9.82)

Information source: ZOOLOGIST, MONTANA NATURAL HERITAGE PROGRAM, 1515 EAST SIXTH AVENUE, P.O. BOX 210800, HELENA, MT 59620-1800. 406/444-3009.

January 5, 2000

Montana Natural Heritage Program
Species of Special Concern: T06-07S, R41E in Rosebud County
Prepared for the MT DNRC Oil & Gas Lease Sale

(MTNHP ref. 001)



Montana Species of Special Concern
Oil & Gas Lease Sale
T36N, R57E, Sec. 16 in Sheridan Co.

Species Data

Point Locations

- Animal
- Plant
- Community
- Other

Managed Areas

- Tribal Lands
- BLM special areas
- Other BLM Lands
- National Park Service
- US Fish & Wildlife Service
- National Forests
- Wilderness areas
- Research Natural Areas
- State Trust Lands
- MT Fish, Wildlife & Parks
- Private preserves & conservation easements

Search Area

- Species locations depicted outside the search area have imprecisely-known locations and may actually occur within the search area.
- Not all legend items may occur on map.
- This map displays management status, which may differ from ownership.
- Features shown on this map do not imply public access to any lands.
- Refer to accompanying documentation for full explanation of map features.

Scale of Miles 0 1 2 3 4 5 6 7

Request nhp4077q
January 04, 2000

MONTANA Natural Heritage Program
Natural Resource Information System
Montana State Library
PO Box 201800
Helena, MT 59620-1800
(406) 444-3009

January 5, 2000

Montana Natural Heritage Program
Species of Special Concern: T36N, R57E, Section 16 in Sheridan County
Prepared for the MT DNRC Oil & Gas Lease Sale

Scientific Name: SISYRINCHIUM SEPTENTRIONALE
Common Name: BLUE-EYED GRASS

Global rank: G3G4 Forest Service status:
State rank: S1 USF&WS Endangered Species Act Status:
BLM status:

Survey site name: TADPOLE LAKE

App. No. 5041, T36N R57E Sec 16 has similar habitat to this site. The stream, pond, prairie pothole, etc. buffer stipulation will be placed on this tract's lease to cover this and other concerns.

County: SHERIDAN

USGS quadrangle: TADPOLE LAKE

Township:	Range:	Section:	TRS comments:
036N	057E	25	

Precision: G - GENERAL LOCATION RECORD; ACCURATE TO APPROX. 5 MILES
Elevation: 2250
Last observation: 1997-06 Size (acres): 1

Location:
"2 KM EAST OF COMERTOWN"

Element occurrence data:
LOCAL.

General site description:
IN MOIST SOIL AROUND A PRAIRIE POTHOLE WITH ANEMONE CANADENSIS AND CREPIS RUNCINATA.

Land owner/manager:
PRIVATELY OWNED LAND (INDIVIDUAL OR CORPORATE)

Comments:
COLLECTED BY P. LESICA AND B. MARTIN. NOTE THAT DIRECTIONS TO SITE, TRS DATA AND POTHOLE ELEVATION ARE INCONSISTENT WITH ONE ANOTHER. LOCATION MAPPED IS BASED ON TRS DATA.

Information source: LESICA, PETER. DIVISION OF BIOLOGICAL SCIENCES, UNIVERSITY OF MONTANA, MISSOULA, MT 59812.

(MTNHP ref. 001)

DEPARTMENT OF NATURAL RESOURCES AND CONSERVATION

MARC RACICOT, GOVERNOR
1625 ELEVENTH AVENUE

STATE OF MONTANA

DIRECTOR'S OFFICE (406) 444-2074
TELEFAX NUMBER (406) 444-2684
PO BOX 201601
HELENA, MONTANA 59620-1601

RECEIVED
JAN 14 2000
D.N.R.C.

January 11, 2000

TO: Teresa Kinley, Hydrogeologist, MMB

FROM: Steve Dobson, LUS, CLO

RE: March 7, 2000 Oil & Gas Lease Sale, Pondera County
App# 5056, T29N, R5W, Sec. 36, 640 Acres

The above lease consists of 40 acres CRP, 126.5 acres dryland agriculture, and 473.5 acres native range. The Dry Fork of Marias cuts this track. See attached map for locations. The Dry Fork is a perennial creek. This area has abundant oil and gas activity through out. I have no concerns pertaining to oil and gas production or exploration on this track.

The CRP stipulation and the 100 Ft. stream, etc. buffer stipulation will be added to the tract's lease.

AG
C.&P.
AG
Marias
AG
Fork
Dry
T 4 N
R 5 W

Montana Fish, Wildlife & Parks

RECEIVED
JAN 18 2000
D.N.R.C.

There are no tract-specific comments noted below. However, based on comments from DNRC Field offices and the MT Natural Heritage Program information, and review of topographic maps of the areas in FWP Region 6 on the March 7, 2000 MT Oil and Gas lease sale, stipulations have been recommended for placement on the leases of these tracts.

Rt 1-4210
Glasgow MT 59230
January 13, 2000

Teresa Kinley, Hydrologist
Minerals Management Bureau
Lands Division
1625 Eleventh Ave
Helena MT 59620

Dear Ms. Kinley:

My comments pertain to the March 7, 2000 oil and gas lease sale stated in your January 12, 2000 letter. My comments are pertinent to those sites located within Montana Fish, Wildlife and Parks Administrative Region 6. The following counties are included in this region: all of Hill, Roosevelt, and Sheridan; those portions of Dawson and Richland lying north of Highway 200.

Generally, I recommend no surface occupancy or other activity be allowed on any of the sites during the March 1 through July 1 period. This will help protect breeding and nesting upland game birds, and fawning and early rearing big game animals. If the activity is to take place exclusively on cultivated cropland, the recommendations do not apply.

Thank you for the opportunity to comment.

Sincerely,

Harold Wentland/aj

Harold Wentland
Region 6 Wildlife Manager

HJW/aj

Cc: Steve Knapp

Kinley, Teresa

From: DNRC NELO Havre Unit
Sent: Tuesday, January 18, 2000 9:30 AM
To: Kinley, Teresa
Cc: Roberts, Craig
Subject: O&G Lease Sale

O&G doc

Teresa,

Here is an attached memo for the upcoming lease sale. Please contact me if you have any questions.

Casey Kellogg

MEMORANDUM

TO: TERESA KINLEY, HYDROLOGIST/GEOLOGIST, MMB

FROM: CASEY KELLOGG, HAVRE UNIT MANAGER, NELO

RE: March 7, 2000 Oil & Gas Lease Sale
Hill County

I have reviewed each tract of land associated with this proposed Oil & Gas lea sale. I included comments for the pieces of land that are located within the Havre Unit.

I recommend proceeding with the standard lease sale on all the tracts of land reviewed in this MEMO.

STATE OF MONTANA
OIL & GAS LEASE SALE - MARCH 7, 2000

PRE-SALE APPLICATION REPORT

APP#	TOPO MAP	TWP	RGE	SEC	DESCRIPTION		ACRES

LESSOR: DEPT OF NATURAL RESOURCES & CONSERVATION

PAGE 1

HILL (NELO-H, FWP-6)

+5006 Cowan Reservoir 30.N 14.E 16 ALL * 640.00
Sand Coulee goes through the NE4 of this section. This coulee would be covered in the sensitive areas stip placed on the lease per Land Board direction, since the tract is within the Rocky Boys Indian Reservation. of this tract

+5005 Cowan Reservoir 30.N 14.E 33 ALL 640.00
This tract contains 640 acres of native rangeland.
This tract is within the Rocky Boys Reservation. Per Land Board direction, the sensitive areas stipulation will be added to this tract's lease.

5086 Bear Paw Lake 30.N 16.E 7 NW4NW4 40.00
Cement Hill
This tract contains 40 acres of native rangeland.
This tract is within the Rocky Boys Reservation. Per Land Board direction, the sensitive area stipulation will be added to this tract's lease.

5087 Bear Paw Lake 30.N 16.E 16 LOTS 1,2, W2NE4, SE4NE4, SE4 317.17
This tract contains 317.17 acres of native rangeland. There is a reservoir located in the sou portion. Beaver Creek Park borders this tract on the west boundary. This county park separates the tract from the Rocky Boys Reservation by ~ 1/2 mile. Due to the tracts presence adjacent to the park, the sensitive areas stipulation will be added to this tract's lease.

5088 Shambo SE 30.N 16.E 36 ALL 640.00
This tract contains 640 acres of classified grazing land. There is also timber on the majorit of this section. A reservoir is located in the NW4. Sawmill Coulee is located in the SW4 of this tract. The avoid wooded areas stip. and the stream, reservoir, etc. buffer stipulation will be added to this tracts lease

5008 Barber Butte 30.N 17.E 36 NW4, N2NE4, SW4NE4, S2SW4 * 360.00
Wind Creek and a reservoir are located in the southwest portion of this land.
The stream, reservoir, etc. buffer stipulation will be added to this tracts lease.

APP#	TOPO MAP	TWP	RGE	SEC	DESCRIPTION		ACRES

LESSOR: DEPT OF NATURAL RESOURCES & CONSERVATION

5089 Shambo NE 31.N 16.E 36 LOTS 1,2,3, W2NE4, W2, SE4 639.83
This tract contains 598.13 acres of native rangeland and 41.7 acres of hayland. There is a spring development and a stock tank in the W2 of this tract.
The spring, etc. buffer stip will be added to this tract's lease.

5004 Laredo 32.N 13.E 36 ALL * 640.00
The S2 contains 313.8 acres of classified agriculture land. There is a cemetery located along the east boundary where the N2 and S2 divide the section. The No surface occupancy of cemetery sites stip will be added to this tracts lease.

5002 Kremlin 33.N 13.E 32 SW4 LESS 1 ACRE 159.00
This tract contains 143 acres of classified agriculture land.

5007 Lake Thibadeau SW 36.N 16.E 18 E2 320.00
Creedman Coulee East
This tract contains 148.3 acres of classified grazing land, 104.2 acres of classified grazing land, and 14 acres of sacrifice acres. There is a water pit located in the NE4SW4.

The stream, reservoir, etc. buffer stip will be added to this tract's lease.

Kinley, Teresa

From: Moore, Sharon
Sent: Monday, January 24, 2000 1:51 PM
To: Kinley, Teresa
Subject: March Oil & Gas Sale

Hi Teresa, Please let me know if you have any questions. Sharon

March Oil Sale doc

STATE OF MONTANA
OIL & GAS LEASE SALE - MARCH 7, 2000

PRE-SALE APPLICATION REPORT

Note: For comments on tracts with a "+" sign before the application number, see comment lists from prior sales. These tracts will be marked with → in front of their application #.

APP#	TOPO MAP	TWP	RGE	SEC	DESCRIPTION		ACRES
LESSOR: DEPT OF NATURAL RESOURCES & CONSERVATION					* The cultural resources/paleontological resources stipulation is added to every lease.		
DAWSON (ELO, FWP-7)							
+5019	Twin Forks Reservoir	13.N	57.E	6	LOT 7, E2SW4, SE4		290.54
5020	Twin Forks Reservoir Hodges	13.N	57.E	16	NE4NE4, N2NW4, SW4SW4, SE4		320.00
	This section is all grazing with some deep draws and a badlands type area with erosive soils. The unstable soil conditions/steep topography stip. will be added to this tracts lease.						
5024	Upper Magpie Reservoir Twin Forks Reservoir	14.N	56.E	16	ALL		640.00
	This section is all grazing land and much of it is badlands, very steep and erosive soils. May be paleontological or archaeological concerns. * The unstable soil conditions/steep topography stip. will be added to this tracts lease.						
5025	Twin Forks Reservoir	14.N	56.E	36	ALL		640.00
	This section has 373.7 acres CRP and the rest is grazing land. The grazing land has some badlands with steep erosive soils. There is one small reservoir. The CRP stip, the stream, reservoir, etc. buffer stip, and the unstable soils/steep topography stip. will be added to this tracts lease.						
5026	Twin Forks Reservoir Hodges	14.N	57.E	16	ALL		640.00
	This section is all grazing land and part of it is rough steep badlands with very erosive soils. There is one mile of stockwater pipeline with 2 tanks. The unstable soils/steep topography stip will be added to this tracts lease.						
+5028	Stipek	16.N	56.E	5	YELLOWSTONE RIVERBED AND RELATED ACREAGE		219.10
+5029	Stipek Belle Prairie	16.N	56.E	16	LOTS 1,2,3,4, E2W2, E2		640.80
+5030	Allard	16.N	56.E	36	LOTS 1 THRU 8, S2N2, SE4		642.08
5031	Belle Prairie Cluster Buttes NW	16.N	57.E	16	ALL		640.00
	This section is all grazing land with some deep woody draws. Soils are erosive on hills and draws. There are two powerlines, one is a large overhead line. The avoid wooded areas stip. and the unstable soils stip will be added to this tracts lease.						
+5032	Cluster Buttes NW Cluster Buttes	16.N	58.E	16	ALL		640.00
FALLON (ELO, FWP-7)							
+5033	Morris Butte	8.N	60.E	3	LOTS 3,4, S2NW4, SW4		320.10
+5034	Baker NE	8.N	60.E	6	LOTS 1,2,3,4, S2NE4	*	234.10
+5035	Baker NE Morris Butte	8.N	60.E	8	S2		320.00

+5036 Morris Butte 8.N 60.E 16 ALL 640.00
This section is all grazing land now, the CRP contract expired.
Comment noted.

+5037 Rush Hall Reservoir 9.N 59.E 16 ALL 640.00

+5038 Morris Butte 9.N 59.E 36 ALL 640.00

+5009 Rocking Chair Butte 10.N 58.E 2 LOTS 1,2, S2NE4, SE4 319.54

+5039 Cap Rock 10.N 58.E 12 NW4 160.00

+5010 Lawrence Creek East 10.N 58.E 14 SE4 160.00
Rocking Chair Butte

+5011 Rush Hall Reservoir 10.N 58.E 36 ALL 640.00
Lawrence Creek East

5001 Carlyle NW 10.N 59.E 12 SE4 160.00
This tract is all grazing land with some small hills.

+5013 Shell Butte 10.N 60.E 16 ALL 640.00

+5014 Shell Butte 10.N 60.E 20 NE4 * 160.00

+5015 Ollie 10.N 60.E 36 ALL * 640.00

+5017 Cap Rock 11.N 58.E 36 ALL 640.00

RICHLAND (ELO, FWP-6, FWP-7)

5060 Sidney NE 23.N 59.E 13 YELLOWSTONE RIVERBED AND 124.50
Fairview RELATED ACREAGE IN S2
This tract of land along the river is close to Richland Park so there may be concerns related to aesthetics. There are probably noxious weeds present which may be an issue with any development. The navigable rivers no-surface occupancy stip will be added to this tracts lease. This stip would cover these concerns.

5059 Fairview 23.N 60.E 18 YELLOWSTONE RIVERBED AND 240.00
RELATED ACREAGE
This tract of land is adjacent to the one listed above and is also by Richland Park so may have aesthetic concerns with development. There are probably noxious weeds present.
The navigable rivers no-surface occupancy stip will be added to this tracts lease. This stip would cover these concerns.

ROSEBUD (ELO, FWP-7)

5061 Birney SW 6.S 41.E 16 ALL 640.00
This section is all grazing land with high steep erosive hills. There is timber present. When I did a lease renewal I found lithic scatter and some possible teepee rings. Access would be difficult on this section. The avoid wooded areas stip. and the unstable soils/steep topography stip. will be added to this tracts lease.

5062 Birney SW 6.S 41.E 36 LOTS 1,2,3,4, W2E2, W2 638.45
This section is all grazing land. It is really a rough section with some timber present. Soils are erosive and there are some deep draws. Access would be limited.
The avoid wooded areas stip and the unstable soils/steep topography stip will be added to this tracts lease.

5063 Spring Gulch 7.S 41.E 16 ALL 640.00
This section is all grazing land with rough steep erosive hills. Timber is scattered throughout the section. Access would be limited. There may be some cultural sites on this section. The avoid wooded areas stip. and the unstable soils/steep topography stip. will be added to this tracts lease.

WIBAUX (ELO, FWP-7)

+5016 Rocking Chair Butte 11.N 58.E 16 ALL 640.00

+5057 Cap Rock	11.N	59.E	16	ALL		640.00
5058 Carlyle NW	11.N	59.E	36	ALL		640.00

This section is all grazing land with a couple of old reclaimed gravel pits. Water includes two dams and a developed spring. The spring is by a coal vein that homesteaders mined in years gone by. The stream, reservoir, spring, etc. buffer stip will be added to this tract's lease.

5018 Graveyard Hill	12.N	57.E	16	N2, SE4, E2SW4, NW4SW4		600.00

This section is all grazing land with an intermittent creek and small dam. A controlled burn was done on this section last year to open up a heavy dense stand of juniper. There is some Canada thistle present but it should be covered by standard weed stipulation. The stream, dam, etc. buffer stip and the avoid wooded areas stip will be added to this tract's lease.

+5021 Hodges SW	13.N	57.E	36	ALL		640.00
+5022 Freeman Creek Hodges	13.N	58.E	16	ALL		640.00
5023 Hodges SE	13.N	58.E	36	ALL		640.00

This section is all grazing land with one reservoir and two developed springs. There is some lithic scatter located near one of the springs. There are some erosive soils. The stream, reservoir, etc. buffer stip will be added to this tract's lease. The soils are covered under basic stip #1 - operating plan review.

+5027 Cluster Buttes SE	15.N	58.E	36	W2		320.00

LESSOR: DEPT OF TRANSPORTATION

WIBAUX (ELO, FWP-7)

5012 Carlyle NW	10.N	60.E	2	A TRACT OF LAND IN LOTS 3 AND 4		1.96

* Part or all of the tract is not state-owned surface

Comments From Sharon Moore & Marc Aberg 4/18/95
For the June 6, 1995 Oil & Gas Lease Sale.

NSO For Cemetery added

App# 5074 17N-50E-Sec 36
The majority of this section is agriculture with a deep wooded draw running through the section. There is leafy spurge and canadian thistle present. There is potential wildlife habitat with the wooded draw. There is also a cemetery present in the SW4SW4SE4.

App# 5070 17N-51E-Sec 16
This section includes 114 acres of farm land with rest being grazing. Sevenmile Creek is located in the south half. There is potential habitat for deer, antelope, and upland game birds.

App# 5071 17N-51E-Sec 34
This tract of land is grazing land. There is potential habitat for deer, antelope, and upland game birds.

App# 5072 17N-51E-Sec 36
This section is all grazing with a county road running through it. Excellent overflow site through the center. There should be high wildlife potential for deer, antelope and upland game birds.

App# 5068 18N-50E-Sec 16
This section is all grazing land with a creek present. The highway cuts through the southwest quarter. Potential habitat for deer, antelope, and upland game birds.

App# 5069 18N-50E-Sec 36
This half section is all grazing land with an intermittent drainage. The highway also runs through this tract of land. There is some potential for habitat for deer, antelope, and upland game birds.

FALLON

App# 5081 5N-61E-Sec 16
This section is all grazing land. There is an active prairie dog town. Also potential habitat for deer, antelope, and upland game birds.

App# 5007 9N-59E-Sec 16
This section is all grazing land with Cabin Creek running through it. There is a good possibility that there may be leafy spurge present as this is a real problem area. Good potential habitat for deer, antelope, and upland game birds. The stream, reservoir, etc. buffer stip. will be added to this tracts lease. Weeds covered under basic stip added to all leases.

App# 5008 9N-59E-Sec 36
This section is all grazing land and is split by the highway. There's a large reservoir in the northwest corner. There's also two intermittent drainage. Potential habitat for antelope and upland game birds. The stream, reservoir, etc. buffer stip. will be added to this tracts lease.

App# 5009 10N-58E-Sec 36
This section is all grazing land with two different creeks, one in the north east quarter and one in the southwest quarter. There's an old gravel pit in the northeast quarter. Potential habitat for deer, antelope, and upland game birds. The stream, etc. buffer strip will be added to this tract's lease

App# 5015 10N-59E-Sec 16
This section is all grazing land with a county road running through the northeast quarter. The majority of this section is badlands and extremely rough. Excellent habitat for deer. There is stockwater pipeline present.

App# 5027 10N-60E-Sec 16
This section is all grazing with the exception of 60 acres of farmland that's being seeded to alfalfa hay. There are two creeks running through this section. There are also two wells. Potential habitat for deer, antelope, and upland game birds. The stream, well, etc. buffer strip. will be added to this tracts lease.

App# 5028 10N-61E-Sec 16
The majority of this section is hayland which is crested wheatgrass and alfalfa. A drainage runs through the southern end. Potential habitat for deer, antelope, and upland game birds.

WIBAUX

App# 5029 11N-59E-Sec 36
This section is all grazing land located along the Wibaux highway. There are two reclaimed gravel pits. There are shallow hill present. The stream, pond, etc. buffer strip. will be added to this tract's lease

App# 5030 11N-60E-Sec 16
The northwest quarter is CRP, 148 acres. The rest is grazing land and in the southwest quarter there is an intermittent stream. There is also an old homestead. Potential habitat for deer, antelope, and upland game birds.

App# 5026 11N-61E-Sec 16
This section has 158 acres of farming on the north end, the rest is grass with a wooded draw in the southeast quarter. There is also a R/W for a stockwater pipeline running through the section. May be habitat for deer, antelope and upland game birds.

App# 5031 12N-60E-Sec 8
This is almost all farming with a wooded draw in the southwest corner. Some upland game birds or deer may be present.

App# 5032 12N-60E-Sec 16
There are 415 acres of farming, the balance is grass. There are a couple nice wooded draws. It's located adjacent to the Lame Steer National Wildlife Refuge. This is potential habitat for deer, antelope, and upland game birds.

Comments From Sharon Moore & Marc Abery (July 26, 1995, For the Sept. 12, 1995 MT. Oil & Gas Lease Sale

APP 5073 15N, 58E, SECTION 18

This tract is grazing along with 35 acres of alfalfa hay. The interstate highway runs through it. Krug Creek is in the south half of the section. Fair potential for cultural sites. Good habitat for deer, antelope, and upland game birds.

stream stip added to all tracts on this page

APP 5074 15N, 58E SECTION 20

This tract of land is all grazing land with an interstate highway and a smaller highway cutting through it. There is a developed spring and Krug Creek also runs through the tract. There is also a reservoir that backs on to state land. There is the remnants of an old homestead. Biggest problem is noxious weeds which include canadian thistle and russian knapweed, the latter being of special concern in our area.

APP 5161 16N, 52E, SECTION 36

This section is all grazing land with a lot of gravel hills in the east half. At the base of the gravel hills there's a lot of spring activity with one developed spring. High potential for finding cultural sites. Good habitat for deer, antelope, and upland game birds.

APP 5162 16N, 53E, SECTION 16

This is a section of mostly open grazing land with a few gravel hills. There's intermittent drainage present through the center of section along with one dam. Potential habitat for antelope and upland game birds.

APP 5163 16N, 53E, SECTION 36

This section is all grazing land with some rough hills in the middle of section. There's an intermittent creek in the southwest corner. Some lithic scatter was found on the hills. Good habitat for deer and antelope.

Dawson County

→ APP 5077 16N, 56E, SECTION 36

cultural stip on all tracts

This section is all grazing land with Griffith Creek running through it. There is also an interstate highway crossing this section. Good potential for cultural sites and possibly paleo as well being this close to Makoshika. Habitat for deer, antelope and upland game birds. The stream, etc. buffer stip will be added to this tract's lease. The cultural resources stip is added to all leases

CRP stip

APP 5078 16N, 57E, SECTION 36 Interstate is covered by basic stip 1 - ap. plan reviews.

There is 283 acres of CRP with rest being grazing land. There is an power line and a huge overhead transmission line present. There's an developed spring and tank in the northwest quarter. There's also a spring in the drainage in the southwest quarter. Good potential for cultural. High wildlife potential for deer, antelope, and upland game birds.

APP 5079 16N, 58E, SECTION 36

This is all grazing land with Boxelder Creek running through it. It's has a large reservoir present. Soils are silty. There is high potential for cultural. Habitat for deer, antelope, and upland game birds.

WIBAUX

stream stip added → APP 5065 13N, 57E, SECTION 36
This is all grazing land with Horse Creek running through it with an undeveloped spring. Good habitat for antelope.
The stream, spring, etc. buffer stip. will be added to this tract's lease

→ APP 5066 13N, 58E, SECTION 16
stip #1 for soils This is all grazing land with a short stockwater pipeline in the southwest quarter. Very rugged badlands section with habitat for deer and antelope. The unstable soils/steep topography stip. will be added to this tract's lease.

Stream stip added APP 5068 14N, 58E, SECTION 36
This is all grazing land with lots of small drainages. There are tepee rings in the southwest quarter. A county road runs through the section. High wildlife potential for deer and upland game birds.

Stream stip added → APP 5075 15N, 58E, SECTION 36
This is all grazing land with an interstate highway through the northwest quarter. There is a drainage through the center with several reservoirs along the drainage. Potential habitat for antelope. The stream, etc. buffer stipulation will be added to this tract's lease. Interstate is covered by basic stip 1- operating plan review

CRP stip APP 5076 15N, 59E, SECTION 18
There are 100 acres of CRP, the rest is grazing land. Probably an old homestead tract. Good wildlife habitat.

Stream stip added APP 5002 15N, 60E, SECTION 16
There are 105 acres of agriculture with the rest being grazing. Hay creek runs through it. There are undeveloped springs on the creek. High potential for cultural sites and for deer and antelope.

CRP stip APP 5080 16N, 59E, SECTION 32
There are 67 acres of CRP, 63 acres of cropland, the rest is grazing. Boxelder Creek runs through the north end. High potential for cultural. Habitat for deer, antelope and upland game birds.
Stream stip added

CRP stip APP 5001 16N, 60E, SECTION 36
Stream stip added There are 68 acres of CRP and 275.8 acres of cropland, the rest is grazing land. There is a creek running through the tract with an undeveloped spring. High potential for cultural. Good habitat for deer, antelope and upland game birds.

Partial Copy of Sharon Moore's Comments For the June 4, 1996 oil and gas lease sale.

The cultural stipulation is placed on all tracts proposed for oil & gas leasing. The base weed stip is placed on all tracts and can be utilized to require mitigation measures when needed. A special weed stip has been added where Sharon has noted tract-specific known occurrence concerns.

04-08-96

STATE OF MONTANA
OIL & GAS LEASE SALE - JUNE 4, 1996

HYDROLOGIST'S REPORT

APP#	TOPO. MAP	TWP	RGE	SEC	DESCRIPTION	ACRES

LESSOR: DEPT OF NATURAL RESOURCES & CONSERVATION

DAWSON (ELO, FWP 6 & 7)

SPECIAL NOTE: The majority of sections in Dawson County that are included in this oil and gas sale involve some really rough grazing land. It varies from rolling hills to breaks and badlands. Soils are often erosive. There is some farm ground on benches but then it often drops off sharply in to deep draws. There is high potential for cultural sites because of gravel on the hills. This area is also really good wildlife habitat for deer and upland birds. There may also be some antelope on more open sections.

If after leasing these sections for oil and gas and we start receiving requests for seismic there will be strong stipulations because of access. Many would be restricted to poltershot and using helicopters, ATV'S or walking. Any oil development could require building roads in rough country which could require a lot of dirt work and special stipulations depending on the situation.

5052 Poverty Flat East 16.N 54.E 10 NE4 160.00

There's about 150 acres of block farming on this tract of land with a small acreage of grazing. Low potential for wildlife.

5053 Poverty Flat East 16.N 54.E 12 S2NE4, SE4NW4, NE4SW4 160.00

This tract includes 142.2 acres of block farming, the small remainder is unused grazing or hayed. There is no water and low potential for wildlife.

5054 Poverty Flat West 16.N 54.E 16 ALL 640.00

Much of this section of land is very rough grazing land with erosive soils. Potential for gravel and also for cultural sites because of the gravel. High potential for wildlife. Some more gently sloping soils in northeast part of section.

→ 5055 Stipek 16.N 56.E 5 YELLOWSTONE RIVERBED AND RELATED ACREAGE 219.10

This tract of land is probably really good wildlife habitat. Also good chance there's noxious weeds present such as leafy spurge and Canada thistle. This tract of land is close to Glendive so might be some concerns that would surface as a result of that. There are the obvious concerns about water quality because of the Yellowstone River.

No Surface occupancy - Navigable riverbed etc. stip added. Weeds covered by base weed stip.

5056 Stipek 16.N 56.E 8 YELLOWSTONE RIVERBED AND RELATED ACREAGE 154.88

Same comments as above.

No surface occupancy - navigable riverbed etc. stip added.

→ 5057 Stipek 16.N 56.E 16 LOTS 1,2,3,4, E2, E2W2 640.80

This is a rough section of hills and breaks located about a mile from the Yellowstone River. There is an intermittent drainage with some springy areas. There is some gravel present also. High potential for cultural sites and wildlife.

Stream, wetland, etc. buffer stip added.

→ 5157 Cluster Buttes & Cluster Buttes NW 16.N 58.E 16 ALL 640.00

This section has shallow rolling hills with Boxelder Creek located in the southwest corner. Good potential for wildlife and cultural sites.

Stream, etc. buffer stip added.

5058 Poverty Flat West 17.N 53.E 36 ALL 640.00

This section is all grazing land. Part of the section is shallow to gravel soils with the rest being steep erosive badlands. There are some water holes in the northeast corner. Lithic scatter and a club type object have been found along the ridge next to the badlands. Good potential for wildlife in the badlands area.

Stream, etc. buffer stip added.

5186 Poverty Flat East 17.N 54.E 16 ALL 640.00

This section is all grazing land with very rough steep erosive hills. I had a difficult time finding a place to cross this section on ATV. There is one spring in these deep draws and possibly more. High potential cultural and wildlife.

Stream, etc. buffer stip added.

* Erosive Soils, badlands, trees, etc. can be covered under base stip #1 - mitigation measures stipulated in TLMD's approval of operating plans.

5127	Circle Reservoir & Richey NW	22.N	51.E	32	E2 STATE DOES NOT OWN THE SURFACE.	*	320.00
5128	Richey	22.N	52.E	28	N2NE4, SE4NE4, S2S2, NE4SE4 STATE DOES NOT OWN THE SURFACE.	*	320.00
5130	Buffalo Creek NE & Kraut Coulee	23.N	50.E	16	ALL		640.00

There are 189.6 acres of cropland on this section with the remainder being grazing land. There is an intermittent drainage with one undeveloped spring. Good wildlife habitat and good potential for cultural sites.

Stream, spring, etc. buffer stip added.

FALLON (ELO, FWP-7)

SPECIAL NOTE: I've some of the same concerns in this county that I did in Dawson with some rough badlands type areas should seismic requests come in the future. In addition there's some serious leafy spurge problems in this county and if seismic work would be done in the future, it would cause considerable concern. There is no way seismic work could be conducted without trucks going through spurge. There is a very active weed control effort in this area by most ranchers and by the county. Movement of that spurge seed would have long lasting impacts which could be very costly for ranchers. Restricting seismic to winter use after seeds had dropped and snow was on the ground would help. Development of oil wells would not be a big issue because impacts are more limited.

Base weed stip will be added to all tracts.

5027	Waterhole Creek	7.N	61.E	16	ALL		640.00

This section is all grazing land which is rolling hills with some gumbo knobs. Soils are erosive. Potential habitat for wildlife and some potential for cultural sites.

→5001	Morris Butte	8.N	60.E	3	LOTS 3,4, S2NW4, SW4		320.10

This is a very rough section of grazing land with erosive soils. There is one developed spring. Good habitat for wildlife and potential for cultural sites.

Stream, spring, etc. buffer stip. added.

→5002	Baker NE	8.N	60.E	6	LOTS 1,2,3,4, S2NE4 STATE DOES NOT OWN THE SURFACE.	*	234.10
→5003	Baker NE & Morris Butte	8.N	60.E	8	S2		320.00

There are 105.7 acres of CRP on this tract of land with the rest being grazing land. There is potential for wildlife and cultural sites.

CRP stip added

→5004	Morris Butte	8.N	60.E	16	ALL		640.00

This section includes 30.2 acres of CRP with the rest being rolling grazing land. Some of the soils are erosive. There is a possible sheepherder's monument on this section which involves a sandstone outcrop with rocks piled on top of it. Should be habitat for wildlife. There is an intermittent drainage.

CRP stip added, Stream, etc. buffer stip added. — New note Jan. 2000, CRP contract has expired.

5005	Morris Butte	8.N	60.E	36	E2		320.00

This section includes rolling hills with some erosive soils. There is an intermittent drainage with three dams. Potential for cultural sites and habitat for deer and antelope.

Stream, pond, etc. buffer stip added.

5006	Badland Draw	8.N	61.E	16	ALL		640.00

This section is all grazing and includes rolling hills into breaks/badlands type terrain. Johny Creek runs through the section. Soils are very erosive. There is a leafy spurge problem on this section which is being addressed through an aggressive spray program. Good wildlife habitat and good potential for cultural sites.

Stream, etc. buffer stip added - Special weed stip added.

5007	Badland Draw	8.N	61.E	28	E2		320.00

There's 77.5 acres of cropland on this tract along with rolling prairie, a creek and a few acres of badlands. There are some erosive soils along with a serious leafy spurge problem which is being addressed by using sheep grazing. The overflow area is listed as a wetland and there is one spring that is dug out. Good habitat for wildlife and there is potential for cultural sites.

stream, spring, wetland, etc. buffer stip added. - Special weed stip added.

5008	Badland Draw	8.N	61.E	36	LOTS 1,2,3,4		112.40

This tract of land is rolling grazing land with some badlands so soils are erosive. There is also a leafy spurge problem on this lease that lessee has been working on by spraying. Good habitat for wildlife and some potential for cultural sites.

Special weed stip added.

+ 5009 Shell Butte 9.N 60.E 16 ALL 640.00

There's 472.8 acres of cropland on this section. There's also 160 acres listed as an overflow site which includes the sidehills and drainages that cut through this section. Low potential for cultural sites but should be some habitat for wildlife along drainage area.

+ 5010 Shell Butte 9.N 60.E 20 SE4 160.00

There's 90 acres of alfalfa/grass hay on this tract with the remainder being crested wheatgrass pasture. There is an old homestead located on this section. Probably some wildlife use of hayland.

+ 5011 Morris Butte 9.N 60.E 32 NE4, E2NW4, NE4SW4, NW4SE4 320.00

There are 83.3 acres of CRP on this lease with the rest being grazing. The grazing is rolling hills with two nice wooded draws which make good wildlife habitat. Some of the soils are erosive. An old homestead along with a lot of junk vehicles, etc. is located on this tract of land.

CRP stip added.

+ 5012 Badland Draw 9.N 60.E 36 ALL 640.00

This is a very rough section of land, most is badlands with Cannonball Creek running through the section. Access would be limited in much of section and soils are very erosive. Really good habitat for wildlife and could be good potential for cultural sites.

Stream buffer stip added

5147 Ayer Spring & Dorothy Draw 10.N 56.E 16 ALL 640.00

This section is all rolling to rough hills with a stockwater pipeline running through section. Good potential for wildlife.

5148 Ayer Spring NE 10.N 57.E 4 S2 320.00

This ranch includes the worst leafy spurge problem in the ELO area. The lessee has bugs put out as biocontrol throughout the ranch. The entire overflow area is spurge in addition to spurge being scattered throughout the uplands. Because of the severity of the problem access might be severely restricted during seismic activity and any oil development would have to have stipulations developed to deal with location of roads, pad sites, etc.

Biological control stip and special weed stip added

5149 Lawrence Creek West 10.N 57.E 16 ALL 640.00

The comments from above also apply to this section except there's no overflow area. Spurge is still scattered throughout the upland areas.

Biological control stip and special weed stip added

→ 5013 Rocking Chair Butte 10.N 58.E 2 LOTS 1,2, S2NE4, SE4 319.54

This tract of land is grazing with an active homesite lease also present. Some of the soils are erosive and there is an overflow area present. Some potential for wildlife and cultural sites. *

Homesite covered in lease. Soils covered by buffer stip / review of op. plan.

→ 5014 Cap Rock 10.N 58.E 12 NW4 160.00

This quarter section is all grazing. It's gently sloping uplands with sandy soils. Habitat for deer and antelope.

→ 5015 Lawrence Creek East 10.N 58.E 14 SE4 160.00

This quarter section of grazing land has a large reservoir present and there's also an oil or gas pipeline that crosses it. Habitat for deer and antelope.

Stream, pond, etc. buffer stip added.

→ 5016 Carlyle NW 10.N 59.E 12 SE4 160.00

This tract of grazing land includes gently sloping uplands. Habitat for deer and antelope.

→ + 5017 Shell Butte 10.N 60.E 20 NE4 * 160.00
STATE DOES NOT OWN THE SURFACE.

→ + 5018 Ollie 10.N 60.E 36 ALL * 640.00
STATE DOES NOT OWN THE SURFACE.

→ 5020 Cap Rock 11.N 58.E 36 ALL 640.00

This section of grazing land is rolling to really rough hills with some gumbo outcrops. Soils are erosive and access may be limited in areas. Good habitat for wildlife. Fair potential for cultural sites. *

The unstable soils/steep topography stip. will be added to this tracts lease.

* The cultural resources stip. is added to all leases

Houses & pipelines, etc. covered under department rules & regulations.

5098 Kincheloe Ranch 12.N 32.E 16 ALL 640.00
This section of grazing land has erosive clayey soils. Rattlesnake Creek runs through the east side of section. Good antelope country.
Stream, etc. buffer stip added.

5106 Mosby SE 13.N 30.E 36 ALL 640.00
This section is all grazing land which has erosive soils. The Mussellshell River is located only feet from the state section so good habitat for wildlife and good potential for cultural since there is some gravelly soils present also.
River buffer stip added.

5108 Kincheloe Ranch 13.N 31.E 36 ALL 640.00
This section is all grazing land with some very erosive soils. There's a really large reservoir on this section plus a couple of intermittent drainages. Along the drainages there is a problem with Canada thistle. I found a baculite and an ammonite along one of the drainages. The lessee has a hunting cabin located just off the state land near the large reservoir.
-Stream, Reservoir, etc buffer stip added - Base weed stip is also on the tract. Fossils - paleontological research see under gen. stip

5110 Kincheloe Ranch 13.N 32.E 34 W2 320.00
This tract of land would be good for oil development because according to Marc's field report it's flat for miles with little chance of cultural sites.

5111 Regnal Ranch 13.N 32.E 36 ALL 640.00
This section is grazing land with granular clay soils and saline upland soils which are very erosive. Good habitat for antelope. Limited water in the area.

5029 McGinnis Butte SE 13.N 33.E 36 ALL 640.00
This section is granular clay soils which are erosive. Good habitat for antelope. Low potential for cultural.

WIBAUX (ELO, FWP-7)

SPECIAL NOTE: Ditto same concerns already expressed about rough country and areas with leafy spurge.

5153 Ayer Spring NE 11.N 57.E 18 E2 320.00
This tract is gently rolling hills. There's a problem with leafy spurge. Habitat for deer and antelope.
special weed stip added.

→ 5019 Rocking Chair Butte 11.N 58.E 16 ALL 640.00
This section of grazing has rolling hills and badlands. Lot of erosive soils and areas with limited access. Good wildlife habitat and some lithic scatter was found on this section. There's a lot of varying type of rocks on this section, some rather unique that would have lent themselves to stone tools. * The unstable soils/steep topography stip will be added to this tracts lease

→ 5021 Cap Rock 11.N 59.E 16 ALL 640.00
This section of land includes 357 acres of cropland with the rest being grazing. Potential wildlife habitat.

5022 Carlyle 11.N 60.E 36 ALL 640.00
There's 387.1 acres of cropland or hayland on this section, all of which is in small contour fields. The rest is rolling hills with an intermittent drainage. Good wildlife habitat.
Stream, etc. buffer stip added.

5023 Carlyle 11.N 61.E 32 N2SW4, W2SW4SW4, LESS RR R/W 95.52
There's 94 acres in CRP on this tract with the small remainder being unused.
CRP stip added

5024 Hodges SE 12.N 59.E 16 ALL 640.00
This section of grazing is all gently rolling hills. Habitat for deer and antelope.

5025 Carlyle NW & Red Top Butte 12.N 59.E 36 ALL 640.00
This section of grazing land includes a 40 acres overflow area that is fed by Beaver Creek. Good wildlife habitat and potential for cultural sites.
Stream, etc. buffer stip added

5026 Carlyle & Duck Creek 12.N 60.E 36 ALL 640.00
There's 262.1 acres of cropland on this section and a homesite lease. The grazing land is split by an overflow site. Some potential for wildlife and possibly cultural.

5064 Odland Dam SW 15.N 59.E 36 NE4, S2 480.00
This tract of land includes 171.9 acres of CRP and a homesite lease and numerous outbuildings. There are some erosive soils present along with a creek flowing through the section. There's also a waterspreading project that is usually hayed.

CRP stip added
Stream, etc. buffer stip added.

Partial copy of Sharon Moore's comments
For the December, 3, 1996 MT Oil & Gas
Lease Sale.

10-04-96

STATE OF MONTANA
OIL & GAS LEASE SALE - DECEMBER 3, 1996

HYDROLOGIST'S REPORT

APP#	TOPO	TWP	RGE	SEC	DESCRIPTION		ACRES
LESSOR: DEPT OF NATURAL RESOURCES & CONSERVATION							
DAWSON (ELO, FWP-7)							
5056	Upper Magpie Reservoir Twin Forks Reservoir	13.N	56.E	16	ALL		640.00

The basic cultural/paleontological resources stip. has been added to all tracts

This section has very erosive granular clay soils. In my field review I noted that there were more fossils on this section than on any other section I'd been on in our area. There is a dam located on east section line. Soils and Stream, dam, etc. buffer stip added

5057	Twin Forks Reservoir	13.N	57.E	6	LOT 7, E2SW4, SE4		290.54

This tract has rolling hills some of which may be erosive. There are some remnants of an old homestead on this tract. Vibroseis work was conducted on this section this summer. Small # Erosive hills Covered under base stip #1

Applications 5048 through 5053 pertain to Yellowstone Riverbed and related acreages. The primary concerns would be related to water quality and protection of the river. This area is also prime habitat for wildlife and birds especially white tail deer. Very good possibility that noxious weeds are present such as leafy spurge and canada thistle.

The no-surface-occupancy stip For riverbeds and related acreage has been added to these tracts & should cover both concerns

5048	Hoyt	14.N	55.E	4	YELLOWSTONE RIVERBED AND RELATED ACREAGE		50.00
5061	Forest Park Hoyt	14.N	55.E	5	YELLOWSTONE RIVERBED AND RELATED ACREAGE		197.90
5072	Hoyt	14.N	55.E	8	YELLOWSTONE RIVERBED AND RELATED ACREAGE		166.00
5049	Hoyt	14.N	55.E	9	YELLOWSTONE RIVERBED AND RELATED ACREAGE		84.00
5051	Hoyt	14.N	55.E	19	YELLOWSTONE RIVERBED AND RELATED ACREAGE		145.90
5052	Hoyt	14.N	55.E	20	YELLOWSTONE RIVERBED AND RELATED ACREAGE		11.00
5053	Hoyt	14.N	55.E	30	YELLOWSTONE RIVERBED AND RELATED ACREAGE		1.20
5062	Upper Magpie Reservoir	14.N	55.E	36	ALL		640.00

The majority of this section is rough badlands/breaks type landscape which would be inaccessible to either vibroseis or shot holes. The one accessible area in the north part of the section has a stockwater pipeline running through it. It would be best to restrict seismic activity to poltershot. The potential for archaeological and paleontological sites is also high. see above (top of page) Soils - steep topography stip added.

5063	Upper Magpie Reservoir Twin Forks Reservoir	14.N	56.E	16	ALL		640.00

The majority of this section is badlands and steep hills. Any seismic activity should be restricted to poltershots in the rough areas. Good potential for archaeological and paleontological sites. Soils - steep topography stipadded See top of page.

5064	Twin Forks Reservoir	14.N	56.E	36	ALL		640.00

This section has 373.7 acres of CRP with the rest being grazing land. There are some badlands present. There is one small dam located on this section. CRP stip added to this tract, Reservoir, streams, etc buffer added

5065	Pleasant View	15.N	54.E	16	ALL STATE DOES NOT OWN THE SURFACE.	*	640.00
5066	Forest Park Glendive	15.N	55.E	22	S2SE4 AND YELLOWSTONE RIVERBED AND RELATED ACREAGE STATE DOES NOT OWN THE SURFACE ON S2SE4	*	98.80
5067	Glendive Allard	15.N	56.E	16	ALL STATE DOES NOT OWN THE	*	640.00

APPENDIX D: Public Comments Received Before Deadline

APPENDIX E: Late Comments

Central Land Office

Memo

To: Teresa Kinley

From: Robert Vlahovich RV

Date: 01/26/00

Re: Comments for March O&G Leases

The following are comments on tracts for the March sale of O&G leases arranged by application number.

5042 - Hound Creek, considerable elk use, antelope use — The stream buffer stip. will be added to this tracts lease. (Not T&E species) No info submitted From MTNHP.

5043 - Elk Creek, considerable elk use, antelope use — The stream buffer stip. will be added to this tract's lease along w/ the avoid wooded areas stip. Not T&E species - Not listed in info From MTNHP

5044 - Crooked Creek, considerable elk use, antelope use — The stream buffer stipulation will be added to this tract's lease along w/ the avoid wooded areas stip Not T&E species - Not listed in info from MTNHP

5045 - Considerable elk use, antelope use — The avoid wooded areas stipulation will be added to this tract's lease Not T&E species - Not listed in info From MTNHP

5046 - Considerable elk use, antelope use — No trees noted on topo. map Not T&E species - Not listed in info from MTNHP

5054 - Hound Creek and Crooked Creek, considerable elk use — The stream buffer stipulation will be added to this tract's lease along w/ the avoid wooded areas stip. Not T&E species - Not listed in info From MTNHP

5055 - Pine Coulee, considerable elk use → The stream buffer stip will be added to this tract's lease along with the avoid wooded areas stip.

5079 - County road, recreation area, waterfowl use, Nilan Reservoir

5080 - County road, recreation area, waterfowl use, Nilan Reservoir

5081 - Numerous potholes, waterfowl use, antelope use

5082 - Springs, antelope use

5083 - Antelope use

5084 - County road, poor tract, potholes, antelope use, waterfowl use

Note: 5079 - 5084 could be considered part of the "front"

→ The Rocky Mountain Front sensitive areas stipulation will be added to the leases of these tracts.

5047 - Pine coulee, antelope use — The stream buffer stipulation will be added to this tract's lease. Not T&E species.

5048 - Springs, antelope use — The stream (springs, etc.) buffer stipulation will be added to this tract's lease. Not T&E species

5049 - Springs, antelope use
Not T!E species — The stream, buffer stipulation will be added to springs, etc. this tract's lease.

5050 - Pine coulee, antelope use
Not T!E species — The stream, etc. buffer stipulation will be added to this tract's lease

5051 - Springs, antelope use
Not T!E species. — The stream, springs, etc. buffer stipulation will be added to this tract's lease

5052 - Antelope use, elk use
Not T!E species - Not included in MTNHP listing. No trees noted on topo map.

5053 - Antelope use, elk use
Not T!E species - Not included in MTNHP listing.

C:\USER\RV\teresa kinley memo.doc — The avoid wooded areas stip. will be added to this tracts lease.